AMERICAN ANNALS

OF

The Deaf,

EDITED BY

EDWARD ALLEN FAY,

UNDER THE DIRECTION OF

R. O. JOHNSON, OF INDIANA, F. D. CLARKE, OF MICHIGAN, J. H. JOHNSON, OF ALABAMA, A. L. E. CROUTER, OF PENNSYLVANIA, AND J. W. JONES, OF OHIO,

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AMERICAN ANNALS OF THE DEAF.

VOL. LI, NO. 4.

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THE DEVELOPMENT OF THE LEGAL STATUS OF THE DEAF: A COMPARATIVE STUDY OF THE RIGHTS AND RESPONSIBILITIES OF DEAF-MUTES IN THE LAWS OF ROME, FRANCE, ENGLAND, AND AMERICA.*—I.

INTRODUCTION.

Before beginning a comparative study of the legal rights and liabilities of the deaf, it may be well to inquire briefly into the nature of deaf-mutism and to note some of the results which naturally follow when one is born deaf or becomes so in early infancy. Without some appreciation of the psychological questions involved, it is often difficult to determine just what should be the legal status of the deaf-mute. Because the real nature of deafness and the true capacity of the deaf are now understood far better than ever before, the legal status of even the congenitally deaf is not far from normal in our own country, but this has not always been true in English and American law, and is not yet the case in most European countries.

Great changes have been wrought in the intellectual, moral, and industrial status of the deaf since less than a

*A Thesis submitted to the Faculty of Law and Jurisprudence of The George Washington University in part satisfaction of the requirements for the degree of Doctor of Civil Law.

century ago the Rev. Dr. Thomas H. Gallaudet established at Hartford, Connecticut, the first permanent American school for the instruction of deaf-mutes; and it is because of these changes in the general condition of the deaf that the legal status of this by no means small class of our people has become more nearly normal. Never before in the history of the world has the condition of the deaf been less unfortunate than it is to-day, and in no other country are their rights so fully recognized as in the American Republic. So fully admitted in theory here are both the rights and the liabilities of the deaf, that at first thought it may appear unnecessary to attempt any discussion of the legal status of the deaf in America.

However, even in the United States it not infrequently happens that the misfortune of deafness seems to open the way for depriving some unfortunate one of his rights, while on the other hand it often turns out that a deaf-mute who is guilty of some crime or misdemeanor will escape punishment simply because the judge or the jury did not appreciate the degree of intelligence of the accused and treated the case with a leniency not warranted by the facts. In reality, a man's deafness ought not to be permitted to interfere in any way with his enjoyment of civil rights; neither should a deaf-mute of sound mind and good understanding ever be acquitted because of his deafness, when he is found guilty of any serious breach of law. Such compassion on the part of those who execute the law is misplaced, and is really an injustice to the many thousands of law-abiding deaf people of the country.

A century ago the deaf-mute in America was generally looked upon as a social, intellectual, and moral pariah. In law the status of the deaf-mute from birth was extremely uncertain; his capacity was considered as scarcely above that of the idiot or the imbecile. The contrast shows what progress has been made. To-day the innate capacity

of even the totally uneducated deaf-mute from birth is recognized. The capabilities of the educated deaf are made evident by their successful attainments in widely varied fields of labor.

Although comparatively little has been written regarding the legal aspects of deaf-mutism, the general literature of the subject from other points of view is ample, especially since the middle of the eighteenth century. Yet even this literature only serves to show how far short of a correct understanding of many of the problems of deaf-mutism were most people prior to the beginning of the nineteenth century. The errors of physicians and philosophers as to the true nature of deaf-mutism have, until comparatively recent times, been among the chief causes of the tardy recognition of the capacity of the deaf-mute and the possibility of his being fitted to assume a normal status in the community.

Deaf-mutism is either congenital or adventitious. A deaf-mute, strictly speaking, is a person who, having been born deaf or having lost his hearing in infancy, has not acquired the power of speech. A person born deaf will remain mute unless he be given special instruction in speech. A child that is not born deaf will naturally learn to speak by subconscious imitation of the speech of those with whom he associates. However, if such a child become deaf, or so nearly deaf as to be unable to hear the voices of those about him, he will in a short time become dumb, unless his friends make untiring efforts to preserve his speech. Thus the adventitiously deaf, who become so in early infancy, may also be classed as deaf-mutes. Muteness is simply the consequence of deafness. But deafness prevents the child who is born deaf or who becomes so at a tender age from acquiring language in the ordinary way. For centuries it was held that deafness from birth shut off the unfortunate so afflicted from all possibility of acquiring

language, written and spoken. And herein is found the main reason for the exclusion of deaf-mutes from birth from legal privileges which they now enjoy in our own country even though they may be illiterate.

The deaf-mute, deprived as he is by nature or accident of the ordinary avenue for the acquisition of language, employs naturally a language of gestures, which he seems to master without apparent effort just as the hearing child acquires speech through the ear. There are in reality three distinct types of language; spoken, written, and pantomimic. And the language of gestures is a language just as truly as is spoken or written language. It is the natural language of the deaf, but as it was not recognized as a language separate from written and spoken until modern times, a deaf-mute not knowing how to write or speak was deprived of the exercise of many of his legal rights, and was presumed to be incapable of any considerable degree of mental development. As has been well said, language is indeed, next to life and intelligence, the most precious possession of man; for by it he manifests his thoughts and his wishes, his impressions and his sentiments. It distinguishes man from the lower animals. By means of it he acquires knowledge through the experience of his fellow men. But spoken language for the congenitally deaf is always an artificial medium and must needs be most laboriously acquired, whereas it is perfectly natural for the hearing child to use speech. The ear is the natural channel for the acquisition of speech; the eye an artificially cultivated one. Hence, even with the best possible oral training, the speech of the congenitally or quasi-congenitally deaf person must be artificial. But the sign language is to the deaf-mute what spoken language is to the hearing person. Both the deaf and the hearing must learn written language by conscious effort; yet the hearing child has

the decided advantage in that spoken and written language are alike composed of words, whereas the sign language is ideographic; a picture language so to speak. Hence, the deaf child from birth or early infancy has little or no conception of verbal language without special instruction; therefore, both the spoken and the written forms of language are quasi-foreign to him. Herein lies the great difficulty in the education of deaf-mutes; and because of his inability to use correctly the language of the people with whom he lives, the average deaf-mute is not generally credited with the degree of intelligence which he really possesses. The foreigner who does not understand and use correctly the language of his adopted country is not because of this fact considered as wanting in intelligence; neither should the intelligence of the deaf-mute be judged simply by his command of a language which he has never heard spoken, and with the written forms of which his experience is relatively limited. The bearing of this difficulty of the deaf-mute on his legal status will be apparent even to the superficial observer. The illiterate deaf-mute when brought into court for any cause should be regarded as in a position analogous to that of the foreigner, and should be provided with a suitable interpreter, one who will be able to communicate freely with him in his own natural language. But at the same time he is a citizen entitled to the exercise of all his privileges as such, and his civil status should approximate the normal as nearly as his infirmity of deafness will admit.

Mutism is the direct consequence of deafness from birth or early infancy. Aristotle, Pliny, and other ancient writers make mention of the fact that all those born deaf are also dumb,* but in none of their statements is there found any evidence that the real connection of the two

*Aristotle: "Hist. Animal.," bk. iv, c. 9; Pliny: "Hist. Nat.," x. 69.

defects was understood. The opinion seems to have prevailed that deaf-mutism was the consequence of some defect in the organs of speech. This view was maintained until modern times, almost without exception, and because of the prevalence of these erroneous opinions as to the nature of deaf-mutism, were such varied and senseless attempts made to cure the deaf and dumb as are found described in medical and philosophical treatises of the middle ages and even in some of those of the seventeenth and eighteenth centuries. The great influence of Aristotle* on the philosophy of mediæval Europe had much to do with the denial of the deaf-mute's capacity to receive instruction; and next to the dicta of Aristotle regarding the deaf and dumb, the influence of the dogmatic assertion of St. Augustine† that the very defect of deafness and dumbness from birth hindered faith, since one deaf from birth could not learn letters, by knowledge of which faith must be attained, prevented any general effort to alleviate the lot of the deaf and dumb by education. It is not the purpose of the writer go into the history of the education of the deaf. It is necessary, however, to make plain the fact that the denial of the exercise of certain legal rights and privileges to the deaf and dumb from birth, in Roman law and also in other legal systems of ancient and mediæval times, was due to the misunderstanding of the real nature of deaf-mutism and the lack of appreciation of the mental capabilities of deaf-mutes.

There are many persons educated in schools for the deaf who are spoken of as "deaf and dumb" or as "deaf-mutes" who are not properly described by either of these

*Aristotle: "Prob." xi, 1; also "Sense and Sensibles," c. 1. Vives, "de Anima" (1558), quotes Aristotle and questions the statement of R. Agricola that a deaf-mute from birth could learn to read.

†St. Augustine: "Contra Julianum Pelagianum," bk. iii, 10; and Estio, "In Omnes d. Pauli Epist. Comm." (1614), cit. by Hervas y Panduro in "Escuela Española de Sordomudos" (1795).

terms. Some of them, having lost their hearing by disease or accident after they have learned to speak, retain their speech. Others, deaf from birth or early infancy, acquire speech through skilful instruction. Such persons cannot rightly be termed dumb or mute. The tendency at the present time is to speak of the whole class as "the deaf." The deaf are divided into two great classes: the congenitally and quasi-congenitally deaf and the adventitiously deaf.* It is with the first class that the chief problems as to legal status arise. Even in comparatively early times the rights of the second class were more or less fully recognized, as the members of it usually possessed the ability to speak or to write, having acquired it before becoming deaf. On the other hand, until after the middle of the seventeenth century, the members of the first class were generally supposed to be incapable of instruction, and prior to that time deaf-mutes from birth were in most instances classed with the insane and idiotic, and were therefore deprived of the exercise of many of their legal rights and were excused from legal responsibility.

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[TO BE CONTINUED.]

*See articles on "Deaf-Mutes" in Buck's "Handbook of the Medical Sciences," vol. iii, pp. 361-373. In these articles Professor Fay discusses briefly but authoritatively questions concerning the extent, causes, and results of deaf-mutism, the classification, mental condition, and characteristics of the deaf, their education and industrial occupations in America. President Gallaudet has an interesting and valuable article on the value of the sign-language in the education of the deaf and gives his reasons for favoring the Combined System. Both of these articles were reprinted in the *American Annals of the Deaf*, xxxii, 141-147; xxxiii, 199-216, 241-259.

The writer acknowledges his special indebtedness to the *Annals* and to the works of Dr. Guyot, Dr. Peet, and Dr. Bonnefoy for much valuable matter pertaining to the status of the deaf which he has made use of in the production of his thesis.

THE INSTRUCTION OF THE DEAF BY MEANS OF PICTURES.

LET me disclaim at the outset any assumption that this article will set forth anything new in the educational world. Not always is it a new thing that we need. It is sometimes a great thing to recognize the value of many of the good old ways and to feel such renewed conviction of that value that we are impelled to follow those ways with all our might. This is frequently the path of highest efficiency in teaching. Nothing more than a recognition of the above truth has led to the organization of what I may term a picture library, in the Wisconsin School for the Deaf.

For many years all good teachers have recognized the value of reaching the eye of the student through pictures. No argument is needed in support of the proposition that pictures are of more value in schools for the deaf than they are in schools for the hearing. Valuable as they are everywhere they are of double value to us.

There are probably very few teachers anywhere who have not collected a few serviceable pictures for the instruction, entertainment, or inspiration of their pupils, but this is not teaching by pictures, as I understand it. There must be something farther reaching and more systematic than this. Practically all the ideas susceptible of picture representation that teachers of the deaf ever wish to implant in the minds of their students ought to be in a school for the deaf in such picture form. History, geography, biography, the sciences, the development of modern industries, animal and plant forms, can all be illustrated to the eye.

A collection for this purpose means from six to twelve thousand pictures. This very number makes it impos-

sible for the teacher to find any given picture at a moment's notice. Not being able so to find it she does not use it at the pyschological moment for its greatest usefulness; hence we are forced not simply to a collection of pictures, but to a systematic arrangement of that collection, so that at any time a teacher may secure immediately any picture she may happen to desire, just as one may go to a library containing a hundred thousand volumes and put his hand upon a required book without loss of time. I can best illustrate what I mean by describing what we are doing here.

We have collected about three thousand pictures. It is so easy nowadays to make picture collections that one needs to establish an ideal at the outset. Wise rejections are of quite as much value as wise selections. From the illustrated standard magazines; from printed advertising matter sent out by railroad, steamboat, and summer-resort companies; from the purchase of such pictures as the Perry, the Brown, the Hood, and the Mumford collections; and from advertising catalogues of countless industries, we have gleaned a wonderful assortment of pictures. We have discarded a much larger number than we have mounted. It is worth while to set an ideal high. Many pictures from the above-mentioned sources are too small; many are indistinct; many have no permanent value. On the other hand, many are of inspirational or instructional value because of what they represent, and because of the distinct and artistic way in which they represent worthy things.

Dynamical rather than statical pictures are desirable. Pictures that show forces and processes and movements mean more than those that merely show things. Let me illustrate. A picture of a cotton plant is good, but not nearly so good as a group of pictures showing all the modern steps in cotton culture and manufacture. We have in

one group an excellent picture of a cotton plant with the cotton bolls just opening. In the same group are two showing cotton culture, one by the antiquated mule and "darkey," the other showing a sulky cultivator drawn by two prosperous looking mules driven by a negro bearing equal evidence of prosperity. There is also the cut of the recently invented machine for cotton picking, just invented by Mr. Appleby, a Wisconsin man. Two pictures show the method of ginning and baling the cotton for market; several show the different methods of transportation to market, one by barge in a southern lagoon, another by a Mississippi River steamboat; another shows long trains loaded with the bales of the fiber. Pictures of looms and mills show the manufacture, and last we have mounted the different kinds of cotton fabrics so that the children may feel their texture as well as see them. Not all cotton fabrics need be so mounted. We have the typical ones whose names the children should know, such as calico, gingham, sheeting, etc.

Pictures of the common-place utensils and machinery can be had from catalogues. Our collection includes ordinary pieces of farm machinery, harness with parts named, artisan's tools, furniture, etc.; these are especially valuable with the younger children. It frequently happens that deaf pupils are familiar with tools and machinery whose names are not a part of their vocabulary.

We have the pictures of common birds and animals, common not only to our locality, but those whose names are common in the literature of travel. We have many geographical scenes illustrating modes of life, human types, and natural scenery in all parts of the world. Homes of important characters make another interesting group. It is not necessary here for me to describe further, but the above will suggest to any one how few are the fields of human endeavor that cannot be illustrated to the eye.

When our collection is made we have but entered upon our work. The mounting should be carefully done. A paste should be used somewhat like that used by photographers; the pictures should be trimmed with exactness so that no narrow white marginal lines show upon the mounts. The placing of the pictures upon the mount is a matter of importance. The picture should be placed upon the mount and the location of its corners be determined by measurement and marked by lead pencil before the paste is put upon it. No eye is accurate enough to place pictures upon mounts properly without such measurements.

We use mounts of four colors, a brown, a green, a steel blue, and a light gray. These shades permit very effective color schemes. We use ten-ply board of four sizes, 22 x 28, 11 x 14, $7\frac{1}{3}$ x $9\frac{1}{3}$, $5\frac{1}{2}$ x 7. These sizes cut without waste from the standard cardboard. With our pictures thus collected, selected and mounted, we are where a large library would be with an extensive purchase of books on its hands. We must now accession, classify, alphabet, catalogue, and card-index the collection. These are the things that make the collection a serviceable instrument in the hands of the teachers. These are processes that can be performed by a trained librarian only. For that purpose we secured a librarian who spent five weeks with us merely to start us upon this work. Having once been carefully started we can follow it ourselves. We use the Dewey system of classification commonly used in public libraries.

Our picture collection has only just been put in commission; it has hardly gotten beyond the stage of novelty yet. It does not yet include a wide enough range of subjects. Our shelf room and our card index are planned for a collection of fifteen thousand, of which we have only three thousand at present. You will see therefore that I am not writing of a finished thing but of an idea in progress;

it is, however, an idea in which I have great confidence, and this article is written not so much to urge the teaching of the deaf by means of pictures, as to insist that if the deaf are to be taught by means of pictures, then every school for the deaf should have a collection as wide in its scope as can possibly be collected; and to insist further that the collection will have no value unless it be as thoroughly accessioned, card-indexed, etc., as is a large library.

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THE PROCESS OF AUDITION AND THE MECHANISM WHEREBY IT IS EFFECTED.*

A source of sound may be considered as consisting essentially of an oscillating body immersed in air.

Considering the to and fro movements which take place toward or from the listener's ear, we may note that each time the movement is toward the ear the air particles in the immediate vicinity are struck a blow in the direction of the ear, much as a billiard ball might be struck by a cue. They shoot off under the impulse in the direction of the ear, but can go only a very little way before they are arrested by collision with other air particles which take up the movement. Much as an impulse may be transmitted through a line of billiard balls by successive collisions of ball with ball, so the aerial impulse is transmitted through the free air by successive collisions of air particles with air particles. When the impulse finally reaches the listener's ear the air particles in the external ear are crowded

*Extracted, by permission, from the Report on the Census of the Deaf, 1900. Washington, 1906.

together by the shock and are thus condensed in the passageway, or meatus, causing increased pressure upon the drum membrane of the ear, pushing it in a little way (Diagrams 1 and 2*).

When the motion of the oscillating body is from the ear an opposite effect is produced, resulting in rarefaction of the air in the external ear, causing a lessening of pressure upon the drum membrane.

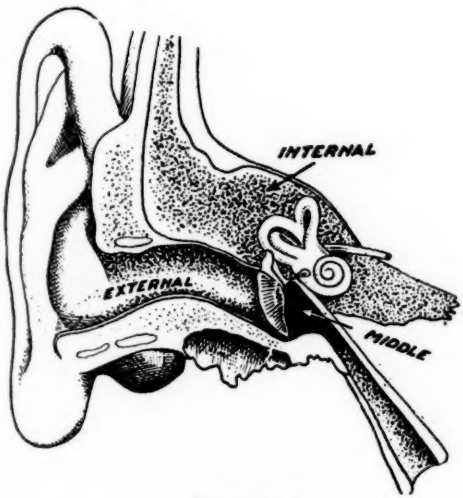

DIAGRAM 1.

A source of sound thus operates to produce alternate condensations and rarefactions of the air in the external ear, causing vibratory movements of the tympanic membrane. The membrane moves inward when the air pressure is increased and outward when it is diminished.

The middle ear contains a mechanism for transmitting the vibrations of the membrane to the liquid contained in the inner ear (Diagram 2). This consists of a series

*Diagram 1 presents a sectional view of the human ear, and Diagram 2 an enlarged plan of the organ of hearing.

of small bones, or ossicles, of which the malleus, or hammer-head, is attached directly to the tympanic membrane. The stapes, or stirrup-shaped bone, at the other end of the series acts somewhat like a piston. Its flat end is attached to a membrane covering the oval opening into the labyrinth. The transmitting mechanism of the middle ear thus consists essentially of a piston operated by a stretched membrane. When the tympanic membrane moves inward, the stapes, or piston, is also pushed inward, thus exerting increased

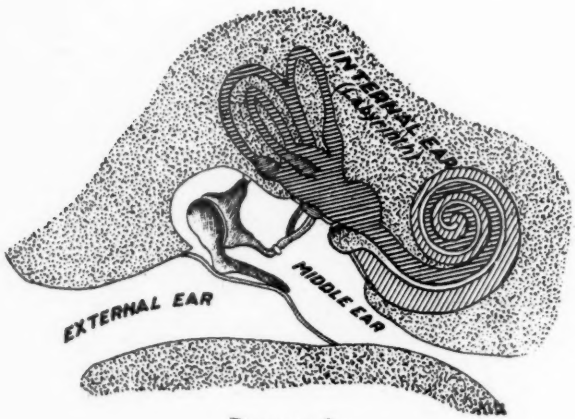

Diagram 2.

pressure on the liquid in the labyrinth. When the tympanic membrane moves outward the pressure on the liquid is relaxed.

The liquid contained in the internal ear is thus subjected to changes of statical pressure; but in the coiled-up portion of the labyrinth known as the cochlea, or snail shell, there is also a to and fro movement of the fluid itself, resulting from the elasticity of the membrane covering the second opening into the labyrinth (the round window). The passageway of the cochlea is divided longitudinally into two distinct channels communicating only at the tip—

shaded differently in the drawing (Diagram 2). When, therefore, the stapes or piston is pushed in at the oval window, an actual displacement of the fluid in the cochlea takes place, traveling up one channel and down the other and bulging out the membrane of the round window. The to and fro movement of the liquid in the cochlea causes a corresponding movement of the hairs, or rods, that line the passageways, and which are connected with the terminals of the auditory nerve.

There can be little question that the true organ of hearing is located within this coiled-up portion of the labyrinth (Diagram 2), but its exact nature and mode of operation are obscure.

The organ of Corti, which is found here, bears a curious resemblance to a musical instrument containing multitudes of rods of different lengths, which are supposed to be tuned to respond to different pitches of sound—a sort of harp in miniature within the ear. The single vibration which alone is transmitted to the internal ear—the resultant of all the sonorous vibrations that exist in the air outside of the ear—is supposed to be here analyzed into its constituent musical elements by the sympathetic vibration of those rods of Corti which correspond to them in pitch. The organ of Corti, however, may not be so essential to hearing as is commonly supposed, for it seems to be totally wanting in parrots and other birds that imitate, and therefore perceive, the sounds of human speech.

At the other end of the labyrinth from the cochlea, the curious arrangement of the three semicircular canals is worthy of note (Diagram 2)—an arrangement in which the plane of each canal is substantially at right angles to the planes of the other two, thus reminding us of the three planes used by mathematicians in coordinating directions in space.

The semicircular canals do not seem to be concerned in the process of hearing, although it is obvious that they constitute a sense organ of some kind, because they are plentifully supplied with nerve filaments connected with hairs, or rods, as in the case of the cochlea. Under the influence of sound vibrations transmitted to the liquid of the internal ear by the to and fro movement of the stapes at the oval window, the liquid in the semicircular canals is subjected to changes of statical pressure, but without the to and fro displacement of the fluid, as in the case of the cochlea. If, however, the head should be moved in any direction, displacements would be produced by the inertia of the fluid. These displacements would differ in the three canals, according to the direction and extent of the movement. It is probable that the semicircular canals constitute a special sense organ whereby we perceive the direction and extent of bodily movements. After waltzing continuously, a sensation of dizziness is usually experienced for some time after stopping, which is probably due to the continued movements of the liquid in one of the canals. Many totally deaf persons fail to experience any sensation of dizziness under such circumstances; and they experience a difficulty in walking steadily in the dark. It is probable that in such cases the injury to the ear has extended to the semicircular canals, so that the persons have lost the use of an organ intimately connected with the instinctive balancing of the body while in motion.

The true organ of hearing seems to be hidden away in the convolutions of the cochlea; but, as it is immersed in a liquid, it is not directly accessible to sound vibrations. The capacity for hearing may exist, and yet the person may be deaf on account of some defect in the transmitting apparatus. Perfection of hearing, therefore, depends

upon the proper functioning of the tympanic membrane and the transmitting mechanism of the middle ear.

The tympanic membrane must be suitably stretched in order to be sensitive to delicate changes of air pressure in the external ear. It differs from an ordinary stretched membrane in not being flat. It is somewhat conical in shape, with the concavity outward, thus resembling, to a certain extent, the under surface of an open umbrella. It can be stretched to a greater or less degree by movements of the malleus, to which it is attached. A very slight movement inward of the end of the malleus increases the tension; and the act of listening consists in the adjustment of certain muscles attached to the malleus, whereby the proper tension of the membrane is secured. There is thus an accommodation of the ear to feeble sounds comparable to the accommodation of the eye for near vision—an adjustment of the focus, so to speak.

A stretched membrane is most sensitive to transitory impulses when the normal pressure of the air is the same on both sides of it. The pressure of the air within the middle ear tends to push the tympanic membrane outward, and the pressure of the air in the external ear tends to push it inward. When these opposite pressures just balance one another the membrane is free to be acted upon by the transitory impulses of sound, without being impeded by an unbalanced pressure from within or without. The external pressure of the atmosphere is subject to change, and without some means of introducing air into the middle ear or removing air from it when necessary, the tympanic membrane would constantly be working at a mechanical disadvantage on account of unbalanced pressures. The Eustachian tube affords the means. Through its agency a communication is established between the middle ear and the back part of the mouth (the pharynx). During the act of swallowing saliva the end of the Eustachian

tube in the pharynx is opened, thus permitting free communication between the external air and the cavity of the middle ear, resulting in equilibrium of pressure on both sides of the tympanic membrane. The Eustachian tube also serves as a drainage tube for the middle ear, preventing secretions from accumulating there.

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THE ANNALS.

WHILE in search of some special information, the writer recently had occasion to go minutely and for the first time over the complete Index to the fifty extant volumes of the *Annals*, both that of Authors and of Subjects.

No one interested in the deaf, and especially no instructor of them, can do this without rising from the task—and it is a task of many hours, even of days—profoundly impressed by the contents and character of the work as a whole. However high may may have been his opinion of the *Annals* before, this general review, *coup d'œil* though it be, will heighten that opinion. This will be so because he will find in these volumes almost every important fact, keen thought, and deep feeling concerning the deaf, their education and welfare, that has found record among men from the first mention of them in the most Ancient of Books down to his own days. He will find these facts, thoughts, and feelings stated, elaborated, discussed from every view-point by hosts of men and women fitted by rich experience for that act;—discussed, too, with a clearness, cogency, breadth, and moderation of statement in controversy that cannot fail to win his admiration and command his respect. If, like the writer, he is only in

search of some special information, he will, as his eye runs down the line, be constantly led into regions that he did not set out to explore. What did this authority think on this subject in which I am daily interested? I know these men were antagonists; what do they say to support their opposing views? This writer is my colleague; what is his stand on that question? This man was mine own familiar friend; does his biographer here do justice to his memory? This noted deaf man has been long out of school and fighting the battle of life; what does he think of this matter? What do these statistics record, and what are the inferences they enforce?—and so on from A to Z, through more than 350 pages of close-set contents.

The reviewer will be struck by the breadth and candor of the successive editors of these volumes. Each of them indeed has his own opinions, and states them, if firmly, still modestly; but, plainly, each and all of them have aimed not to dominate the views of others, not to make the publication an organ of any clique, not to erect or set it to defend some chosen citadel, but rather to make it the broad arena wherein every courteous thinker and poet and truth-seeker and theorist and disputant should have a fair hearing. No publication could more fitly have inscribed upon its every title-page *Tros Tyriusque mihi nullo discrimine agetur.*

The reviewer will be sure to see that he could not, save by years of labor, have arrived at a full and just conception of the treasures stored in the *Annals*, except by the aid of its Index. For that the Index is as necessary as a handle toi ts blade. This Index is remarkably full, clear, complete. It is as perfect in its way as the half a hundred volumes whose contents it makes usable and serviceable, and there must have gone to the making of it an untold amount of thought, labor, pains and patience.

Finally the reviewer will rise with the conviction that the *Annals* practically records from the beginning "the world's work" in regard to the deaf, and with an intelligence, ability and devotion equaled in few other lines of human effort, and not surpassed in any unless it be that of medical science, in which this also shares; he will feel too that the school is wise which makes a complete set of the work and its Index easily accessible to its officers and instructors; and he, if himself an instructor, will have a wider comprehension, a keener appreciation of the work in which he is enlisted, and a sincerer admiration and respect for those who have gone before him in that work, or are still toiling at his side.

AMOS. G. DRAPER,
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Washington, D. C.

THE TWELFTH CENSUS OF THE DEAF OF THE UNITED STATES, 1900.

The law relating to the Twelfth Census of the United States originally limited the inquiry concerning the deaf and the blind to those who were in institutions. Through the zealous efforts of Dr. Alexander Graham Bell, aided by the heads of schools and other friends of the deaf and the blind, Congress was persuaded to remove this limitation and extend the inquiry of the census to all of the "deaf, dumb, and blind" in the country. Even this extension did not apparently promise results of much value, for the amendment which permitted it contained this proviso: "*provided*, that in taking the census of said classes the inquiries shall be limited to the following four questions, namely: name, age, sex, and post-office address."

But there was in this amendment an opportunity for more inquiries than Congress probably had any idea of. The law having been passed and the census taken in accordance with its provisions, the Director of the Census appointed Dr. Bell "Expert Special Agent of the Census Office for the preparation of the report on the Deaf and the Blind" and empowered him "to conduct in his own name the correspondence relating to this branch of the census inquiry." This empowerment Dr. Bell, with the approval and concurrence of the Director of the Census, interpreted in a very broad sense, and he proceeded to obtain, through correspondence with the persons reported as deaf or blind or others acting for them, full information concerning the age when deafness or blindness occurred, the extent of the disability, its cause, the school attendance, the consanguinity of parents, the existence of similar disability in fathers, mothers, grandparents, brothers, sisters, uncles and aunts, and the occupation followed for a livelihood. The result is a census report concerning the deaf and the blind * quite different from those of former years and far superior to them in many respects. We note the following points of superiority in the report concerning the deaf:

1. First—and this is really inclusive of all the others—the entire report is the work of a man who is not only an expert in statistics, but is also thoroughly familiar with the special subject of the deaf. This has never been the case in previous censuses. Persons familiar with the deaf have sometimes been consulted with respect to the investigation and their advice has been followed to a greater or less extent, but never before has such a person had full power to determine the scope of the investigation, to direct the tabulation to be made from the data obtained, and to prepare the report.

*"Department of Commerce and Labor. Bureau of the Census: S. N. D. North, Director. Special Reports. The Blind and the Deaf, 1900" Washington: Government Printing Office. 1906. 4 to, pp. 264.

2. The report covers a wide range of investigation concerning matters of great interest and importance. In 1890, it is true, the questions asked by the enumerators were more numerous even than those of Dr. Bell's inquiry, but the returns in many cases were incomplete and untrustworthy, and some of the most interesting points upon which information was gathered were ignored in the published report. The present report includes statistics concerning the age when deafness occurred, the geographic distribution of the deaf, the degree of deafness, the ability to speak and to read the lips, the means of communication employed, the sex, race and nativity, the causes of deafness, the consanguinity of parents, deaf relatives, the age at the time when the census was taken, the school attendance, and the occupations of the deaf. In connection with the causes of deafness, Dr. Bell gives the simplest and clearest description of the process of audition and the mechanism whereby it is effected that we have ever seen. It is reprinted elsewhere in the present number of the *Annals*.

3. The information upon which the report is based comes from trustworthy sources. Previous reports have been based upon the returns made by the census enumerators, many of whom have always been indifferent or incompetent. Dr Bell has used the returns of the enumerators merely as preliminary data for further inquiry, and his report is based upon information obtained through direct correspondence with the deaf themselves or persons acting for them.

4. The deaf and the blind are entirely separated from the unrelated classes with which in former census reports they have been more or less closely associated. The climax was reached in the census of 1880 when they were coupled with the feeble-minded, the insane, paupers, and criminals

under the general head of "the defective, dependent, and delinquent classes."

5. The tables deal for the most part with the deaf of the whole United States rather than with those of the individual states, territories, and counties. This has the advantage of affording the largest possible aggregates for the tabulated results, while the statistics of individual states, territories, and groups of states and territories are given with sufficient fulness for the comparison of one part of the country with another.

6. The persons reported as deaf are classified upon a scientific basis. In the censuses from 1830 to 1870, inclusive, only the "deaf and dumb" were reported, and the determination of the persons constituting this class was left to the enumerators, many of whom were incompetent. In 1880 the "deaf and dumb" were reported, and the enumerators were instructed to return as such all who became deaf under sixteen years of age, whether they could speak or not. In 1890 all the "deaf," whether they could speak or not and without reference to the age when deafness occurred, were included, and an attempt, which did not succeed very well, was made in the Census office to distinguish the "deaf and dumb" from the "deaf but not dumb." In the present report all the "deaf" are included as in 1890, but they are classified upon a scientific basis. The classification is based not upon their ability to speak, which in the case of a deaf person may be an acquired condition varying from time to time, but upon the age when the deafness occurred, which is a natural and invariable condition. The whole body of the deaf are thus divided into two broad classes: those who became deaf under the age of twenty* and those who became deaf later

*We regret the term employed in the report to designate those who became deaf under the age of twenty, "deaf from childhood," for "childhood" in the common understanding of the word does not continue until the age of twenty.

in life. The age of twenty rather than sixteen is adopted because schools for the deaf generally admit pupils up to that age. There are numerous other subdivisions of the deaf in the report, all of more or less value in the opportunity they afford for instructive statistics.

7. The assigned causes of deafness are scientifically classified according to their effect on the ear instead of being merely recapitulated. They are also considered in connection with hereditary influences as shown by the consanguinity of parents or the existence of deaf ancestors or other relatives.

8. The occupations of the deaf are classified in the same way as those of the general population and are compared with them. There are also interesting comparisons between the occupations of the educated and uneducated deaf, of those who became deaf at different periods of life, of the speaking and non-speaking deaf, etc., etc.

9. The tables are accompanied by graphical diagrams, giving at a glance the important features of the tables and showing their relations to one another. Diagrams were used to some extent to illustrate the tables in 1870 and 1880 but they are much more numerous in the present report.

In the respects above mentioned Dr. Bell's report marks a new era in the statistics of the deaf and establishes a high standard of excellence for future censuses. But with all its merits it fails entirely, we regret to say, in what is generally regarded as the most important feature of a census report. It is not even approximately correct in its statement of the total number of the deaf. The number stated is 89,287. Of this number 51,861 persons—considerably more than half—could hear well enough to understand loudly shouted conversation. These persons ought not to have been included in the census of the deaf. It was the original purpose and desire of the census authorities that they should not be included. The instructions given to the enumera-

tors were expressly intended to prevent them from being included. The instructions read:

"After completing the enumeration of all the members of a family, you will ask whether all the persons just enumerated have good sight and hearing—that is, can see well and hear well. For all such persons no further inquiry need be made; but if you find that some member of the family can not* . . . hear well, you will then ask whether he or she can hear well enough to understand loud conversation; and should it appear that the hearing is so seriously impaired that the person can *not* be made to understand what people say, even when they shout, you will note such person as 'Deaf,' even though, as a matter of fact, he or she may have some slight power of hearing."

How did it happen that (as was ascertained from subsequent correspondence) in more than fifty thousand cases the enumerators disobeyed their instructions and recorded as "Deaf" persons who could hear well enough to understand loud conversation? Dr. Bell's explanation is this:

"It must be difficult for enumerators, who are usually strangers to the persons they return, to decide definitely whether a person is or is not totally deaf; and we must credit the enumerators of the present census with the intention of fulfilling their instructions to the best of their ability. It is therefore probable that the majority of the partially deaf persons returned were laboring under serious defects of hearing, and were not simply 'hard of hearing.' They are believed, as a class, to be persons so deaf that it required correspondence with the persons themselves to ascertain the fact that they were not totally deaf."

But the enumerators were not required "to decide definitely whether a person is or is not totally deaf." They were furnished with the simple test of asking whether the person could hear well enough to understand loudly shouted conversation, and they were directed to make their record in accordance with the reply received to this question. Admitting with Dr. Bell that we must credit them with the intention of fulfilling their instructions to the best

*The words omitted relate to the blind.

of their ability, we believe that their failure to do so was largely owing to the unfortunate wording of their instructions. To the intelligent, educated readers of the *Annals* no doubt the language of the instructions is sufficiently clear. But many of the enumerators were unintelligent and uneducated. Misled by the complicated construction of the long sentence which specifically directs them whom to record as "Deaf," and especially by the concessive clause which follows the words "you will note such person as 'Deaf,'" they probably failed to appreciate the force of the negative particle in the preceding conditional clause (printed in italics in the above quotation from the instructions, but not so printed in the original), and thought that they were desired to return as "Deaf" a person whose hearing is so seriously impaired that he can be made to understand what people say only when they shout.

These 51,861 erroneously returned cases are included in the report under the head of "partially deaf." The only reason assigned for their inclusion is that they "were too numerous to be ignored in the tabulation of the results." This seems an insufficient reason; nay, it seems rather an additional reason why they should not have been included; for the more numerous the errors in the returns the more they vitiate the results. These erroneously returned cases of the deaf ought simply to have been dropped from the record, as for various causes were 35,725 cases of the blind returned by the enumerators, and as were all the other cases of the deaf that Dr. Bell was not able to verify by subsequent correspondence; or, if the information obtained concerning them through correspondence seemed too valuable to throw away, it ought to have been presented entirely separate from that concerning the cases properly returned. We regard their inclusion in the census of the deaf as a grave error for the following reasons:

1. They do not belong to the class of persons whom the census is supposed to report upon.

2. Their return by the enumerators, as has been shown, was contrary to instructions.

3. They have no value even as a statement of the number of persons in the United States whose hearing is imperfect but who can hear well enough to understand loud conversation, for it is to be presumed that a majority of the enumerators, comprehending and obeying their instructions, did not return such persons as "Deaf."

4. They seriously impair the value of the tabulated results, except those in which the "totally deaf" and the "partially deaf" are tabulated separately.

5. They swell the total number reported far beyond its proper proportions.

Omitting the 51,861 erroneously reported cases, we have 37,426 as the number of the deaf* in the United States. This undoubtedly is less than the actual number, for, aside from any omissions that may have been made by the enumerators, only such persons are included in the report as replied to Dr. Bell's circular letters of inquiry. How many names were thus eliminated from the returns does not appear, but it is stated that "several thousands of circular letters of inquiry, sent out to the addresses of persons reported as deaf by the enumerators, failed to bring any reply, in spite of repeated requests for information. These cases were therefore thrown out from the investigation as resting upon insufficient evidence." Among these rejected cases there must have been many

*In the report these properly reported cases are called the "totally deaf" to distinguish them from the 51,861 erroneously reported cases. We do not understand that the word "totally" as used in the report is to be taken in its literal and usual sense, but that it is employed to designate all persons who are too deaf to understand loudly shouted conversation. Probably very many of these persons are not *totally* deaf in the literal and usual meaning of the term.

genuine cases of deaf persons who for one reason or another failed to reply to Dr. Bell's circular of inquiry. We regret the loss of the genuine cases, but we approve of Dr. Bell's action in rejecting such as could not be verified. It is certainly better to have an incomplete return of the deaf and trustworthy information concerning them than a much larger number of cases and no assurance that they are genuine. Dr. Bell's method of gathering the statistics of the deaf is fully justified by the results and we hope it will be continued in future censuses. With more judiciously worded instructions to the enumerators, and with a body of intelligent, well educated, and specially trained enumerators, appointed on the ground of fitness and not of petty services to the party in power, such as we have reason to hope for in the next census, we may expect the same plan to yield reasonably complete and accurate returns as a basis for further inquiry. For such further inquiry also Dr. Bell's method of procedure furnishes an excellent model.

We hope to consider some of the details of the report more fully in a future number of the *Annals*.

E. A. F.

THE SEVENTH SUMMER MEETING OF THE AMERICAN ASSOCIATION TO PROMOTE THE TEACHING OF SPEECH TO THE DEAF.

The Seventh Summer Meeting of the American Association to Promote the Teaching of Speech to the Deaf was held at the Western Pennsylvania Institution, Edgewood Park, Pa., August 25 to 31, 1906. The total enrolment exceeded two hundred, a large proportion of those present being women. The attendance was perhaps not so large as it might have been had the meeting been held at the time originally planned, but all those present appeared

to take a deep interest in the proceedings from first to last. The guests began to arrive Friday evening, and so charmingly did Dr. Burt, his estimable wife, and his admirable corps of officers and instructors entertain them that many remained during the entire meeting, being loath to leave even when the final hour for parting came.

In addition to the entertainment furnished at the Institution there were tours personally conducted by officers of the Institution nearly every afternoon and evening to a number of the many places of interest in and around Pittsburgh. The only regret expressed by any of the visitors was that there was not more time available for the enjoyment of these pleasures. Among the many places visited were the Armstrong Cork Works, New York and Cleveland Gas Coal Mines, Homestead Steel Works, Westinghouse Electrical and Manufacturing Plant, Heinz Pickle Factory, Pittsburgh Industrial Exposition, and the various parks and theatres. There were automobile rides, trolley rides, and last but not least in the eyes of some, opportunities to see a number of good baseball games.

At half past two Saturday afternoon the opening session began with an invocation by Rev. J. E. WRIGHT, D. D., of Pittsburgh. Then followed the addresses of welcome by Hon. JOHN B. JACKSON, President of the Board of Directors of the Western Pennsylvania Institution for the Deaf, Dr. WILLIAM N. BURT, the Superintendent, Dr. SAMUEL HAMILTON, Superintendent of the Allegheny County Schools, and Dr. SAMUEL B. MCCORMICK, Chancellor of the Western Pennsylvania University. The welcome given by Mr. Jackson on behalf of the Directors was most cordial, as was that of Dr. Burt, who made a speech that was especially appropriate and felicitous. The addresses by Dr. Hamilton and Chancellor McCormick were listened to with much pleasure by the audience. In addition to

a welcome the latter gave a resumé of a very carefully prepared address he had planned to give before the Association at a later date on "Life's Inspirations." All who heard him regretted that he was unable to give the complete address. After a few introductory remarks Dr. McCormick complimented his audience by saying: You are in the ranks of those who are helping people particularly and peculiarly in need of help; therefore, this is one of the choice gatherings, composed of people engaged in the very highest employment which can engage the thought and the effort of human beings.

He then spoke at some length concerning the inspiration we all have in the hope of accomplishing our aim and ambition; the inspiration felt by those who never permit obstacles to be their masters but who make them the means whereby they attain unto the accomplishment of their purpose; the inspiration found in the zest of seeking to understand and live our particular lives; the learning what life is, and how to live to-morrow not where we live to-day, but in a larger, more beautiful place, because we see and appreciate what life actually is; and the inspiration of putting joy into the work we are compelled to do, never letting our work be our taskmaster, but always our servant, ever remembering that the very center of our being is not the brain that thinks but the heart that feels.

In closing, Chancellor McCormick very briefly summed up his address in the following language: I am sure that I might multiply these inspirations, but I will mention just these three: the inspiration that comes from the zest in overcoming obstacles; in understanding and living one's life; and in putting our souls with joy into the work which we actually do. And the person who has engaged in these things in this way—it matters not what may claim his time, how hard may be his work, how full

the day which engages his energy; it matters not where he is, nor where he lives, nor what he does—if he is learning along these lines, there is in him inspiration to larger and better things to-morrow than he could do to-day, and an inspiration that will carry him on in the successful accomplishment of his task to the place where he can look back over his life and know that while he has accomplished much work, he has done that finer, that diviner thing—has learned how to live his life for its own sake and for the glory of his God.

Dr. A. L. E. CROUTER, President of the Association, first responded to the hearty welcome extended to the members of the Association, expressing in his brief address the deep appreciation of all present, complimenting the authorities of the Western Pennsylvania Institution upon their magnificent plant and the good work done therein, outlining in a few words the high purpose and liberal platform of the Association, and expressing deep regret at the enforced absence of Dr. Alexander Graham Bell, its founder and first president.

Dr. Crouter then called in turn upon Dr. G. O. FAY of Hartford, Mr. EDMUND LYON of Rochester, Dr. J. N. TATE of Minnesota, Mr FRANK DRIGGS of Utah, Mr. E. MCKAY GOODWIN of North Carolina, and Mr. HARRIS TAYLOR of Kentucky, to reply for the sections of the country from which they came.

On motion, Dr. ALBERT C. GAW of Gallaudet College was elected Assistant Secretary.

A telegram from Dr. BELL and letters from President GALLAUDET, Dr. E A. FAY, Dr. J. R. DOBYNS, Dr. JOB WILLIAMS, and Messrs. F. D. CLARKE, S. T. WALKER, H. W. ROTHERT, J. T. RUCKER, and AUGUSTUS ROGERS, also letters from Messrs. R. S. FRASER and JOHN F. MILLER of Pittsburgh, all expressing regret because of inability to attend the meeting and the hope that it might be a suc-

cessful and profitable one, were presented to the Association and ordered to be filed with the Secretary.

On Saturday evening a large and appreciative audience assembled in the chapel to hear an address by Dr. SAMUEL C. SCHMUCKER, Professor of Biological Sciences at the State Normal School, West Chester, Pa., on

THE REAL PURPOSE OF NATURE STUDY.

For more than an hour Dr. Schmucker held the undivided attention of all present, and the following summary, though in his own words,* gives very inadequate conception of the lecture.

The purpose for which nature study was introduced into school life was to sharpen the powers of observation. To this was soon added a desire to give to those who left school early an insight into at least the simplest things science is opening to the world. With increase in pedagogical study came the desire to furnish with concrete elementary ideas on which later studies might build. With the deep sociological bend modern thought is taking, to all these is added a desire to have nature do for the masses what culture does for the favored few.

On Sunday many of the members accepted the invitations extended to attend services at churches in Pittsburgh. Those who remained at the Institution assembled in the large reception room and took part in a service of song, during which Mrs. WESTERVELT presided at the piano. The singing of Miss ELIZABETH FAY of Hartford on this and on other occasions during the week added much to the pleasure of the visitors.

The meeting held Sunday afternoon for the discussion of questions relating to the moral welfare of deaf children

*None of the addresses or papers presented at the Seventh Summer Meeting are printed in full in the *Annals*. Some of the abstracts given were made by the authors, some by Dr. Gaw, and some by the editor. —E. A. F.

was opened with prayer by Dr. G. O. FAY, of Hartford, Ct.

MISS YALE read a paper written by Miss BESSIE N. LEONARD, of the Clarke School, Northampton, Mass., on

SUNDAY OCCUPATIONS FOR YOUNGER PUPILS.

In this paper Miss Leonard described various kinds of hand work which are used on Sunday in the Primary Department of the Clarke School. The children, except the youngest, attend church in the morning and spend two hours of the afternoon in the schoolrooms. The younger children give both these hours to the occupations described, while the older devote half the time to Bible lessons and nature work, and the other half to the occupations.

The materials used on Sunday are almost exclusively those which have been reserved for that day, though some of the exercises that the older children have on Sunday may be the same as those used by the younger ones on week-days.

The occupations, beginning with the simplest, are the stringing of wooden beads in the primary colors and in the forms of sphere, cube, and cylinder; the sorting and arrangement of peg tiles in designs; the sorting and arrangement of leaves, shells, nuts, cones, and seeds; the stringing of straws and parquetry; the making of paper chains; the outlining of familiar objects with lentils and shoepegs; mass work with rice; modelling with clay; paper cutting and folding; making patterns and designs with parquetry; winding silk around cards so as to produce various figures; and drawing, correlated with the other kinds of form study above mentioned. Whenever possible the subjects chosen are from the world of nature with which the child is more or less familiar and of which we wish to make him more observant.

The second paper was by Mr. EDWIN G. HURD, of Rhode Island, on

SUNDAY SCHOOL WORK FOR INTERMEDIATE GRADES.

After drawing a distinction between moral and religious instruction, the great importance of both of which he duly emphasized, Mr. Hurd advocated that a systematic course in Bible instruction, with the Bible itself as the principal text-book, be begun in the intermediate grades. He outlined the plan pursued in his own classes, stating that the children early become accustomed to finding passages themselves, and that they are called upon to tell the story of the lesson or some particular phase of it in their own words. The teacher does not do all the talking and lesson helps are not followed too minutely. The effort is made to induce the pupils to become Bible students themselves, and to that end they learn what a wonderful library of history, biography, poetry, and general literature the Bible really is.

Mr. Hurd next drew a distinction between the Sunday School work and the chapel service, the central idea of the latter being worship, and that of the former instruction and study. He emphasized the importance of sound moral training being given by the example rather than the precept of the teacher, since the deaf child unconsciously takes his teachers as his ideals and formulates his code of ethics chiefly upon their manner of daily living.

Regarding chapel services Mr. Hurd said he would not depreciate the influence of the sermon, but insisted that as the chapel is the church of the deaf child, he should go there primarily to worship and should, therefore, have some active part in the service.

In conclusion he said the Sabbath should be a day of rest but not a day of idleness.

Mr. Driggs then read a paper (here abridged) written by Mr. JAMES A. WEAVER, of the Mt. Airy Institution, on

SUNDAY SCHOOL WORK FOR ADVANCED GRADES.

The Sunday School for the deaf is of far greater importance than for the hearing. Parental influence, so efficacious in the moral and religious training of the hearing child, is, in many instances, wanting where the deaf are concerned. The parents of deaf children do not, as a rule, understand them sufficiently well to influence them to any great extent. The school, then, has to do much of the parental work and to it falls the two-fold task of providing the moral and religious training, in addition to that of the intellectual.

The benefits to be derived from any department of instruction in our schools for the deaf presupposes a knowledge of language. Language is the expression of thought, and thought is the discernment of relationship. One of the greatest mistakes we can make is to persist in teaching language as language, as a subject separate and distinct, instead of making every subject combine towards the formation of one great language whole. Effective teaching in the Sunday School then not only depends upon a good fundamental grasp of the English language, but the Sunday School lesson is also a creative factor—a stimulus to thought. It is one of the greatest of the agents we have at our command for the building up and development of the English language.

The size of the class is but a secondary consideration to its proper grading according to the language attainments of the pupils. We do not favor the adoption of the leaflet system, or any other scheme of lessons that has been drawn out for hearing children. In our schools for the deaf the conditions are different. The classes are

in charge of professional teachers, who know exactly the mental capacity of their classes, and who can adapt their teaching to their pupils with the greatest nicety. It is highly desirable that a suitable text-book should be used. But given a competent teacher, there is nothing better than the Bible itself. We have generally been able to do the best all-round work when our pupils have had their Bibles open before them. Explanations and illustrations, are, of course, necessary, as they would be in using any text-book, but taken on the whole, the comparative simplicity of the Bible language, its freedom from involved sentences, and the benefits to be derived from a close acquaintance with the beautiful English contained in it, all combine to recommend it as an indispensable agent in the spiritual, as well as the purely intellectual, development of our deaf pupils.

The ground to be covered in a given period is a matter of minor importance. It is an open question as to whether the stories and lessons contained in the Old Testament should be studied before those of the New. The stories of the Old Testament, it has been said, appeal to the younger children more than those of the New and should be told first, while those contained in the New should be reserved for a later period. This may be the view taken by the pedagogue and the psychologist, but the theologian, we venture to think, would take a different course. The wisdom of permitting the minds of young children to dwell exclusively upon the events of the Jewish dispensation, when customs and ideas of life prevailed which are entirely foreign to those of the Christian, does not seem to us to be particularly desirable. If we are to follow out the principles of the intuitive method in our Sunday Schools, and proceed from the known to the unknown, then surely it is advisable to give the preference to the teachings of the New Testament. The

beginning should be interpreted from the end, not the end from the beginning. The true aim of the Sunday School is not so much to impart a knowledge of Bible history as to kindle and fan the flame of the spiritual life within the child. A child may be perfectly familiar with all the stories of the Bible, and yet miss their lessons for to-day. The connection between the events of the Old Testament and those of the New, the promises concerning the coming of the Saviour and his mission, should receive due attention. In dealing with advanced pupils, we should try to adapt our teaching to their immediate needs and conditions.

The geographical features of the Holy Land should not be forgotten. Good maps should be provided for reference, and sketch maps might be occasionally drawn by the pupils. By introducing the study of the geography and typography of the countries and places connected with Bible history, we help to make Sunday School work all the more interesting, and give it a tangible form. A Sunday School museum, containing models and specimens illustrating the manners and customs of Eastern life, is a very valuable aid to teaching. The blackboard should be freely used, and the pupils should be encouraged to take notes. We believe, also, in introducing interesting anecdotes bearing upon our subjects on all occasions when suitable opportunities arise. These form a setting for the lesson, and help to drive home the moral to be conveyed. "Long is the road by rules," says Seneca, "short and easy by examples."

At certain periods there should be a review of the work done, and at the end of the half year or year a test given. If possible, rewards in some suitable form might be given to those who have done the best work. But whether rewards are given or not there should be some incentive offered.

The Sunday School and the chapel each have distinct missions to perform. Judging from the immense amount of importance attached to it in some cases, one would be almost inclined to think that the chapel lecture was the one and the only source of moral and spiritual teaching. We exalt the chapel lecture at the expense of the Sunday School. We confound the needs of the adult with those of the child and the youth. We hear of pupils of all ages and of all grades being assembled in a large room to receive a sermon or lecture. It is assumed that the lecturer is able to reach the minds of all these children. If not, why bring them all in? The answer is, that even if the younger children get but little of the lecture, they benefit in other ways—the assembling of the whole school, the discipline called into action, the spirit of reverence it promotes, and the offering of united prayer—all these things, we are told, are in its favor. Now that the chapel talk has its good points we will not attempt to deny, but if the main object of the assembly be the lecture or the sermon, then we believe that far greater results can be accomplished in the Sunday School than in the chapel. The pupils are assembled in smaller bodies, the lessons are given according to the grading, far better attention and deeper interest in the subject can be maintained, blackboard illustrations of the teaching can be given, and there is time enough for notes to be taken by the pupils. If we leave out the question of the paramount importance of the sermon or lecture, and give it a secondary place, we must regard the assembling of the pupils together in a body in another light, namely, as partaking of the nature of an act of worship. We regard the adoption of a chapel service book, and the introduction into some of our schools of the responsive service, as distinctive marks of progress. The Sunday School and the chapel have their proper places in our institutions, but, as their

names imply, the one is connected with religious instruction and the other is, or should be, associated with the act of Divine worship.

Sunday School work for advanced classes would fail in its object if it ceased with the study of Bible history. This should be supplemented by a course of instruction devoted specially to the study of the faith and duties of the Christian religion. There should be a little book, or course of special lessons, drawn up on broad Christian principles, after the manner of a catechism, and embracing the full signification and explanation of the fundamental principles of the Christian faith, the Lord's Prayer, and the Ten Commandments. Such matters as these are not suitable for lectures to young people. There is nothing particularly attractive about sermons or lectures to hearing boys and girls. It requires a speaker of more than ordinary ability to hold their attention for five minutes at a time. Why, then, should we attach so much importance to the lecture as a means of moral and spiritual development, when the avenues to the mind are not so direct, and when the mental processes must, of necessity, be slower in their action? The lecture is associated with the adult, and the lesson with the child. Such a course of lessons might be drawn up for two distinct purposes; the one simplified for the use of the junior classes, and the other in a more extended and comprehensive form for advanced pupils. Where a chapel service book is used, provision should be made in the Sunday School for the study of the forms of prayer and hymns contained in it. By a systematic programme the course of study in the suggested catechism and the forms of prayer in the Chapel Book might be arranged so as to devote an equal amount of attention to each.

The subject of Sunday School work is one of great importance to oral teachers. If we wish to produce the

best results in our religious and moral teaching, we must bear in mind that much yet remains to be accomplished in that all-important department of our work—the teaching of language. The results in the Sunday School are as closely connected with, and as dependent upon, the efficiency of the language teaching, as they are in every other branch of our work. The final solution of the vexed question of so-called methods will be found, not in the form of communication, but in the perfected method of mental development, in other words, the perfect method of teaching language. There is no limit to the application; it is as important in the Sunday School as in the day school; and "the last word on this important subject will not be said, so long as the human mind continues to yearn for deepened understanding and increased knowledge—not until the finite be merged into the Infinite."

Dr. SCHMUCKER again addressed the members of the Association, this time taking as his subject

THE MORAL TRAINING OF THE YOUNG.

Judging by the applause that he received from time to time throughout the lecture his audience heartily agreed with the line of teaching he presented. The following is but a meagre outline of Dr. Schmucker's address:

Direct inculcation of moral precept is of comparatively little value for children. This is partly because they are too young to be appealed to in that way, and not a little because they are accustomed to listening to such appeals without response. The story that can point its own moral and yet is full of interest for itself is one great means. But the constant holding up to the little duties

of life is the best preparation for the great duties. The true incentive to morality is a powerful example, lived before the eyes of the children.

MONDAY, AUGUST 27.

On Monday from 8.30 to 9.15 A. M., and daily thereafter at the same hour, actual class-room work representing that of primary, intermediate, and advanced grades was exhibited by pupils of the Western Pennsylvania and Illinois Institutions. The class demonstrations of the Illinois pupils were under the direction of Miss EDITH WYCKOFF, and illustrated the method of teaching arithmetic presented by Miss KENT of that school. The class-room work shown by pupils of the Western Pennsylvania Institution was well conducted by Miss DIMMICK, Miss WHITE, and Mr. DOWNING.

At 9.30 on Monday, after prayer by Mr. LINNÆUS ROBERTS, the first paper of the opening session, which was devoted to primary work, was presented by Miss EMMA ROSS THOMPSON of Mt. Airy, who spoke entirely without notes on

THE FIRST YEARS OF THE CHILD'S LIFE IN THE INSTITUTION.

By way of introduction Miss Thompson recounted in a very interesting manner some of the early school experiences of Justin McCarthy, Jacob Riis, and Andrew D. White, quoting largely the words of these distinguished men, all three of whom according to their own testimony seem to have been unfortunate in their early school surroundings. Their capabilities were evidently underrated and unappreciated by their teachers. After inquiring what must have been the fault then and is the trouble now, Miss Thompson said: Perhaps it is a failure on the

part of teachers to remember what education really is—a development physical, mental, moral, and spiritual. You cannot separate them; they are so interlaced, intertwined, and dovetailed that without each part developed you have a warped result, a one-sided man.

Miss Thompson exalted the opportunities for personal influence possessed by the teacher of the young deaf child and said (in part):

Teachers make an idol of a curriculum, forgetting that the teaching of facts is only one small part of their duty to their children. Give the children fair play. A class in school is not a yardstick cut into its component inches, each of the same size, sense, and proportions. Little children, sweetest creation of God, little human beings, with bodies and minds, hearts and souls, they come to us ready and waiting to be shaped just as we teachers choose to shape them. They come just at that tender, loving age when every impression is so keenly felt and the man or woman that is to be is made or marred by the influences of those early formative years. They never know a mother's care. What a responsibility is ours! And with our small classes we have such splendid opportunities to study the peculiarities of mind and temperament of each child. Pay less attention to the class as a whole and more to the individual. It is an easy matter to plan that a class should do a certain amount of work in a given time; to feed the material into the machine and grind out. But it sometimes seems that there is no place in the class for the child who is just a little different from his fellows. Often you hear that this one cannot understand the subject matter taught and so does not belong to this class, or that one will take no responsibility upon himself, but you never hear a teacher say that she has failed to study the child and so does not

know how to reach him, which is perhaps too frequently the case.

We should try to find out in what lines a pupil can work best; strengthen his weakness if possible, but never let him feel, because he cannot excel in all ways, that he is stupid or hopeless. All children cannot do the same work, all cannot attain the same results. Sympathetic study of the child, of his particular needs and requirements, is necessary.

The school is made by the teacher. Her spirit dominates the whole and her ideals make the ideals of the school. If she is enthusiastic, the children are enthusiastic too. If she is happy in her work, the children love to learn. If she is in earnest, so are the children. Public school teachers beg for co-operation on the part of parents. We have none of this to ask for, at least not during the school year. Everything is done for our children to help us in our work. Whatever physical ailments they may have are immediately cared for by eminent specialists. Even work and play are so arranged that neither hinders but each helps the other.

In closing, Miss Thompson said:

Study sympathetically each child under your care, fulfilling his needs rather than your own ambitions, always remembering that practically his every want must be met by you. As to methods, as Huxley said, generally they are nothing more than developed common sense. One may be well versed in the best of methods and yet be a very poor teacher, for no method is successful without the tact that comes with careful, cautious practice.

A paper on

PRIMARY LANGUAGE

was then read by Mrs. EDWIN G. HURD, who said in part:

To teach the deaf to express ideas clearly, exactly, and easily is an art of no mean order, and our first and last effort in the education of the deaf should be directed to that end.

I do not advocate a haphazard use of language, but a systematic plan in its use.

Mrs. Hurd then outlined the plan she pursues with a class of deaf children entering school, stating that she first employs sense-training exercises, followed by voice development and the teaching of the elementary sounds singly and in combination, in words and in short, easy sentences, taking care to have the meaning of the words and sentences understood, since parrot-like speech should always be avoided. The pupils should always be addressed by speech and whether they comprehend all that is said to them or not, they will become better speech-readers by thus early forming the habit of looking at the lips. After about six months, systematic language-teaching is begun, using speech, speech-reading, and writing as the means of communication.

The child must see the idea first, as otherwise the words used will convey no mental picture at all, and there is no better way of first presenting the idea than by the old fashioned action work. When the meaning of a word or form has been made clear, one should never lose an opportunity to lead the child to use it. Here the skill of the language teacher is shown. It is one thing to go through a programme of language drill, but quite a different proposition to get each of ten pupils to make ready and natural application of what has been drilled upon.

Mrs. Hurd then presented somewhat in detail an outline of three years' work in primary language. During the first year she gives an average class approximately two hundred nouns, twenty-five adjectives, seventy-five verbs (including the most common auxiliaries) in the simple tense forms, the simple personal pronouns, the articles, and a few prepositions. She teaches the common sentence forms, simple and compound, including the simplest interrogative constructions, early making use of the ordinary time expressions.

During the second year new sentence forms are introduced, involving the use of transitive and intransitive verbs, prepositional phrases, negative forms, complete questions using all interrogatives previously given; and the use of the verbs *think*, *ask*, and *tell* is begun.

During the third year all forms in which *asked* and *told* occur are given, the present progressive and the past progressive are taught, and many new question forms are introduced. Regular work in reading is begun, the simple stories read being frequently reproduced in the language of the pupil.

Primary language work proper may be considered as covering only the first three years, but systematic language drill during the succeeding three years is of equal importance. Regular drill is therefore continued in accordance with a carefully arranged outline. More difficult constructions are introduced, the remaining verb forms are taught, and an attempt is made to teach colloquial and idiomatic English.

During the fifth and sixth years original stories and conversations and other exercises intended especially to cultivate the imagination are required. The new expressions found in the reading at this stage serve as a basis for much of the language work, but regular drill upon verb forms is continued. Though the full results of

following such a plan as was outlined may not be evident during the elementary years, the influence of the work is far-reaching, as thereby the pupil learns correct methods of acquiring knowledge and right habits of thought, the effects of which are never lost.

The next paper, of which the following is an abstract, was by Miss FRANCES L. GLENN, of Indiana:

SPEECH AND SPEECH-READING IN PRIMARY CLASSES.

The work of an oral class is of a three-fold nature. It should be given in the written form and by means of speech and speech-reading. These three forms are closely associated the one with the other, but speech and speech-reading have a distinctive feature of their own, which makes it possible to consider the work from this point of view.

In this work the teacher has much to do in determining whether the spirit of speech shall rule the class and whether the various phases of the work shall conduce to happiness and interest on the part of the child. Clear purpose and definite aims go far in inspiring in the child the love of speech that will lift him above the ever recurring difficulties, and in the pleasure of attainment help him to overcome and forget the obstacles that are to be met in reaching the goal of good speech and ready speech-reading.

The work should not be limited to the daily detail nor confined to the accumulation of knowledge or of disconnected facts that the need of the hour may call forth, but the teacher, seeing the end of her work from the beginning, should work toward that end steadily, intelligently, successfully.

The success of speech and speech-reading depends not alone upon the method used in the special work of teaching speech, but upon the method used in teaching the written forms of our language. This method should be one that will make English a living, vital force in the thought of the child, thereby finding its living, vital expression through and by speech.

The child should be so held to his work that there will in its every aspect and its every requirement be that hearty and willing response that will bring about perfect unity of thought and action between teacher and pupil. All the work should be so presented that speech will not be a desultory, purposeless act, but a spontaneous expression of thought and feelings.

Speech and speech-reading should be made the channel through which the child's education is received. They should be the two factors in his life that will bring him into closer touch with those about him, and better fit him for taking his place in that broader life which should open up for him upon leaving school.

The purpose of the oral teacher should be to make speech and speech-reading the overlying and underlying forces in every part of the class-room work, and through this medium to bring about the harmonious development of the child's mental powers into a well-rounded, well-balanced mind.

Miss ELIZA KENT, of Illinois, then read a paper entitled

PRIMARY ARITHMETIC.

The aim of the outline here presented is to make numbers interesting and invest them with life; to give the deaf child a perception of values and their relation to quantity; to bring him to comprehend the meaning of a mathe-

matical statement, and to see the whole of a problem; to teach him to form mental pictures so real that his deductions from them should be assured; to avoid such evils as copying and counting; and to build up a vocabulary of arithmetical terms and phrases.

First the memory must assist in acquiring a prompt recognition of quantity within prescribed limits, and of the symbols representing it; the order of things as distinguished from their number; a certainty in regard to the combination and differences of all numbers within twenty; the tables of multiplication and division and of weight and measure; and the language of arithmetic, including such terms as *buy, spend, sell, cost,* etc.

The ability to see dimensions and areas must be made as accurate as possible. For this purpose a variety of blocks are provided in the form of cylinder, prism, sphere, cube, and disk. The cylinders and prisms are in lengths from one to ten inches and the disks represent the unit and its divisions to twelfths. The pupils learn the names of the blocks, and expressions *larger than, smaller than, less than, more than, equal, same as, times, part of, half, third, equally,* etc., and the idea of ratio in the relation of quantities and its consequent effect upon values.

By the use of beans and splints, number or "how many" is taught and distinguished from order, and later, the combination of ones into tens and tens into hundreds is illustrated.

To teach the combination and difference in numbers, dominos are provided, including all combinations within twenty, except those requiring the adding of tens and units, and a certain knowledge of them is required.

In this connection subtraction through addition is learned and later is easily applied to work with larger numbers. The dominos furnish also interesting and never-ending "busy work."

To teach discrimination in dimensions and areas, foot rules are cut into pieces varying in length from one to nine inches long. The pupils first recognize the foot and its parts; later they represent each part at sight by a line drawn on slate or paper. Lastly they draw lines in any of these lengths without visible help. Next surfaces, oblong and square, represented by pieces of pasteboard of definite dimensions, are reproduced and named. At this point the term *dozen* is taught and its use made familiar.

When they have learned sixteen, the toothsome dainties bought by the pound and half-pound make interesting the study of weight.

Next they *make* the table of liquid measure, assisted by a pail of water and the various tin cups holding the required quantities, and many a new word is added to their vocabulary when they write the list of things they or their mothers have bought by the pound, quart, etc.

When their multiplication table reaches four times eight, because incidentally they find that thirty-two quarts make a bushel, they have a bushel of saw-dust and with the *whole* measures construct the table. It is not wise to introduce here the familiar half-bushel and half-peck.

Now they must learn to read the face of the clock and the names of the days of the week and the names and order of the months and the number of days in each. They are interested in learning how to find the time between 10.30 and half-past twelve, or 2 o'clock and 5, because of its relation to ten cents an hour.

As the pupil advances, denominations are added to the tables until they are completed.

From the first *quantity* alone is considered, and whatever symbol or term is needed to represent it is used as a matter of course, with the result that a pound and three ounces, a yard and a half (or one and one-half yards),

three-fourths of a foot, etc., are used as easily as whole numbers.

The pupil first recognizes quantity as a whole to five, selecting from one to six from a group at sight; then by their different combinations to ten, using one hand to separate the whole required from the larger quantity, and both hands when combinations are needed; for instance, for five he picks up that quantity, but for nine he takes four and five, or some of the other combinations making nine. Counting is not allowed in making the choice.

By means of disks, spheres, and various other objects he learns first of one, one-half, and halves, and after an extended acquaintance with them, he takes fourths, one, two, three, and four, and learns their relation to one and to one-half. He makes them, he draws them, he gives them away, he even eats them in the form of cookies and bananas, and they become part of his being and enter into his understanding. The *fractional idea* being thus solidly founded, the smaller divisions, their additions subtractions, multiplications, etc., follow easily and naturally. He must first and for many months find parts of *one* only, not of numbers. Confusion alone results from haste at this point.

Next he finds the ratio of these parts to one as represented in the blocks, and that once definitely established, the relation of the standard unit in any table to the different denominations is easily recognized.

If confusion arises, explanations should not be given; go back to first principles and by repetition lead out into the clear light. Blurred mental pictures are apt to be permanent and explanations often result only in memory work.

In the second year original number stories are required.

When the child has learned that $5 + 3$ is 8, he must tell something, using those numbers and their combination and introducing some of the terms he has had. Later he writes, "Tom bought 8 apples. He ate 3 of them. Then he had 5 apples left." Adding the same formula $5 + 3 = 8$. The way is thus prepared for the minus sign and subtraction, which he always accomplishes by adding.

Almost imperceptibly he steps from the story to the problem, the ending then being, "How many or how much?" Keeping step with his comprehension, the scope of the problem increases and in succession he tells of combination, separation, and combination and separation, as, $6 + 2$, $6 - 2$, $10 - (6 + 2)$, $(6 + 2) - 4$, etc. Doing without understanding is well nigh impossible, so when the pupil can *make* a problem, he can also read intelligently those given him.

A vast amount of very desirable busy work is thus provided with little effort. A few blocks placed in position, or three or four formulas written with the command "Write number stories or problems," and the class is occupied for *any* time.

The statement of an arithmetical fact in as many ways as possible is often required to accustom the pupils to its appearance in different dress, as, one-half of 8 is 4, 4 is $\frac{1}{2}$ of 8, $8 \div 2 = 4$, 2 times 4 is 8, $4 \times 2 = 8$.

Drawings to illustrate formulas given are also required, the drawing differing with the form of the statement, as, "Draw one-half of eight," and "Illustrate 4 is $\frac{1}{2}$ of 8."

The making of change is introduced as early as possible. We do this by adding to the cost of the purchase the amount needed to equal the sum given to the salesman, this being the way in business.

Much attention is given to securing correct mechanical work, requiring frequently certain results within a limited time.

In the final preparatory steps, instead of a detailed analysis, the pupil writes the *meaning* of the problem: "giving the means," as we abbreviate it. For instance—"A boy spent 30c. which was $\frac{3}{4}$ of his money; how much had he left?" The pupil writes, "This means, find $\frac{1}{3}$ of 30c.;" or, "If 15 yds. of cloth costs $5 what will 3 yds. cost?" "This means find $\frac{1}{5}$ of $5." If required, detailed work follows. His ability to do this is the result of his finding proportional ratios in the blocks and the resulting ratios of values. This use of ratio is continued in the higher grade work and simplifies it.

The great danger lies in being led by the interest of the pupil into giving advance steps before the present one is permanently located, which can result only in misunderstanding. Any outline is useless, and, I think, any text-book, unless the teacher is sympathetic and intelligent and can teach the pupil to adapt the few principles to the manifold application. It is no test of a child's understanding of a subject to require of him what he has seen. To be able to apply knowledge to new conditions shows real power, and this can only be obtained by requiring original work based upon an interpretation of general laws.

At the general session at eleven on Monday the members of the Association listened with much interest to

THE ADDRESS OF THE PRESIDENT.

Dr. CROUTER reviewed the operations of the Association since its last Summer Meeting at the Clarke School seven years ago; called attention to the remarkable growth of speech teaching in this country; pointed out some of the elements of weakness and of strength that have attended it; and finally offered some suggestions

whereby he thought the usefulness of the Association might be increased and extended.

Dr. Crouter also paid a fitting tribute to the endeavors of Dr. Alexander Graham Bell to promote the usefulness of the Association and the cause of speech teaching in this and foreign lands.

In speaking of the progress of speech teaching in this country, Dr. Crouter, after quoting the California Resolutions of 1886 and the Colorado Resolution of 1892, said:

These two Resolutions by their adoption committed all American Schools for the Deaf to the policy of teaching speech and lip-reading in an earnest and persistent manner to all pupils capable of being so instructed; they further committed them to the policy of providing aural instruction for pupils of sufficient hearing to enable them to profit thereby, and to the policy of providing oral recitations in oral classes for all pupils able to articulate fluently and intelligibly, and of encouraging them to use their vocal organs on every possible occasion. These Resolutions mean this or they mean nothing. They mean that honest, earnest, just, and persistent effort shall be made to teach every deaf child to speak and to read the lips on all possible occasions, and that this effort shall only be abandoned when the measure of success attained does not justify its further continuance. This is a broad and liberal platform, one upon which all friends of speech and speech-reading may stand. And it is somewhat remarkable that the degree of persistence with which these Resolutions are being enforced in our schools to-day indicates with almost unfailing accuracy the measure of success attending our efforts to teach deaf children to speak and to read the lips in our American schools.

As is well known, this Association was founded in 1890, in consonance with the spirit of the California Resolution, to the end that no deaf child in America might be suffered

to grow up "deaf and dumb," or "mute," without earnest and persistent effort being made to teach him to speak and read the lips. Whatever may have been the personal opinions and sympathies of its members as regards the best methods of securing mental development in deaf children, its great work has been the creating and upbuilding and upholding of public sympathy in favor of teaching speech and lip-reading, whenever possible, in all schools and institutions for the instruction of deaf children. In 1892, two years after the organization of the Association, the percentage of pupils taught speech in all our schools was 49.4; in 1893 it was 54 per cent.; in 1894, 54.4; in 1895, 54.9; in 1896, 54.9; in 1897, 56.4; in 1898, 57.4; in 1899, 61.4. In the year 1900, 64 per cent.; in 1901, 64.7; in 1902, 64.7; in 1903, 67.2; in 1904, 67.3; in 1905, 69.1; in 1906, Mar. 31, 70 per cent. In 1892, the number of pupils taught speech was 3,924, the number not taught speech was 4,016; in 1906, the total number taught speech was 8,145, the number not taught speech was 3,667. Again in 1892, the number taught wholly by oral or speech methods was 1,581; in 1906, the number had risen to 4,274. This increase in the number of pupils taught speech and taught by speech is most gratifying, and indicates the marked attention the subject is receiving throughout the country wherever a school for deaf children is maintained. The increase in the number of speech teachers indicates perhaps better than anything else the marked strides that have been made. In 1890 the number was 213, or 33.2 per cent. of the whole number, while in 1905 the number had risen to 749, or 64.6 per cent. The most marked increase in speech work occurred in what are known as Combined-System Schools, in which all methods are recognized and practised, and in the large number of Day Schools that have been established, chiefly in the middle western states and in California. The increase

in oral schools followed usual normal conditions of growth.

After comparing the statistics of speech teaching in representative American schools in 1891 and 1906 and speaking of the large growth of oral classes in Combined-System Schools, Dr. Crouter said:

Articulation teaching as a sort of ornamental branch, not highly ornamental at that, is a very different thing from teaching speech by and through speech and as a means of mental development and mental culture. It is but the dim shadow of the end sought for, while in the latter is found the full fruition of the teacher's aims and efforts, the realization of the pupil's desires, the fulfillment of the parents' hopes and prayers. The next step taken by Combined-System Schools should be in the direction of providing a separate department in a separate building for all orally taught pupils, thus giving them the great advantages of separate supervision, separate classification, separate instruction, and a real opportunity to acquire practical speech and lip-reading.

Unless debarred by physical or mental defect every deaf child should be given full opportunity to profit by oral instruction from the beginning to the end of the course. Spasmodic attempts to develop speech and the speech habit by half or three-quarter hour vocal gymnastics must with few exceptions in the nature of things end in disastrous failure. If the speech habit is to be established in a deaf child, speech communication must be insisted on at all times and in all places by officers, teachers, and pupils, and all sign communication discouraged and as far as possible prohibited.

One of the most pressing needs of American Schools is a new classification of pupils for purposes of care and instruction. Up to this time, but one basis of classification, that of mental development, has been recognized. All classes of children are received into one and the same

school regardless of physical conditions or previous advantages. In our special schools, the totally deaf, the semi-deaf, the mute, the semi-mute, and in too many instances the feeble-minded, are admitted to the same school and maintained there regardless of consequences. It does not infrequently happen that children partially deaf, or recently become deaf with speech but slightly affected, are placed in schools where they are, perforce, suffered to mingle with children wholly unlike themselves. This is a great wrong, a wrong that some day must be righted. Our schools, of whatever character, should be so systematized that proper segregation and classification on a physical as well as mental basis may be easily and readily carried into effect. Such classification is observed with excellent results in some parts of Europe, and it is greatly to be hoped the day is not far distant when it will be introduced into the schools of this country.

But with the wisest and most complete classification of pupils and the most skillful adaptation of methods, to attain the highest success there remain two or three essential conditions to be considered. First, well trained teachers. Too often this question, if not ignored, has been neglected, in part at least, owing to a feeling that almost any kind of teaching was good enough for deaf children, but more largely to the fact that it has not been possible to maintain schools in which the necessary training might be secured. True, there have been small attempts of a somewhat private character to provide needed instruction, but aside from the Training Class at Northampton and the Normal Department at Gallaudet College in Washington, there has never been any permanent, systematic effort made in this direction until quite recently. Miss McCowen's normal department of the Chicago Day Schools has been in successful operation for a year or more, and the department at Northampton,

begun in 1892, is to be enlarged this fall under Miss Yale's direction. These two departments, unlike that in Washington, will give training in speech and in speech methods only, the study of signs and manual methods of teaching not forming any part of their curricula.

With these three Normal Departments in successful operation, there will soon be a supply of highly educated and carefully trained teachers to draw upon in filling vacancies in our various schools. Parents desirous of providing scientific instruction for the private training of their children will doubtless hasten to avail themselves of the advantages thus supplied. All this must, in the near future, prove a decided uplift in the instruction of our deaf children by and through speech and speech methods.

But with highly trained teachers there must be scientific supervision and also active, sympathetic support on the part of official superiors. With all these conditions well supplied, the work of our schools will receive an impetus that will carry them far beyond anything hitherto dreamed of.

Let me now briefly call your attention to some special present-day features of speech-teaching in this country. First, Private Teaching. There seems to be a very decided movement in favor of private teaching by speech methods in families able to meet the expense, and in a great many instances, probably the majority, with very favorable results. The reasons assigned by parents for pursuing such a course are superior speech and lip-reading, better mental development along more natural lines, freedom from institutional life and all that it involves, and the cultivation of stronger home ties in consequence of uninterrupted family associations. In some of these assigned reasons there is food for reflection. But large schools and institutions possess certain advantages which private

instruction cannot provide. They are better equipped, have larger apparatus, more efficient teachers, and being better regulated enforce better discipline and more studious habits. To these certain advantages must be added the important elements of emulation, of ambition, and the mental friction that is aroused by the association of children in the performance of school and class work. All these important elements of institutional life are largely wanting in private instruction, whatever other advantages it may possess.

Second, Aural Training. There are under instruction in the various schools about 12,000 pupils, and of these there must be at least from fifteen to eighteen hundred, fifteen per cent., possessing sufficient hearing to be of practical value in connection with their instruction in speech. Now just how far this hearing is utilized in our special schools is a question worthy of careful attention, and I bring it before you at this time, inviting your best thought and consideration. There can be no doubt that the possession of any considerable power of hearing is a matter of much importance to a deaf child in its acquisition of speech. If properly utilized, it gives quality and tone to speech otherwise impossible. All this is quite aside from any attempt to increase the power or ability to hear; it is more in the line of teaching the child to use the power it already possesses in the cultivation of its speech. Perhaps too little attention is given to this subject in most of our schools.

Third, Age of School Admission. Another matter of present-day interest is the age at which speech-teaching and lip-reading, and the mental development that should accompany them, may most wisely and profitably be begun in a deaf child. There are some educators who feel that this work cannot be commenced too soon, and to this end there have been established infant schools

or homes for the instruction of young deaf children before they are of school age. The age of admission in some of our larger and older schools has been greatly lowered in recent years, but none, so far as I am informed, have gone so far as to admit at so early an age as these infant schools. Among the advantages claimed for this early training are smoother and more intelligible speech, the formation of more permanent speech habits, and the acquisition of quicker, more exact, and more reliant powers of lip-reading. I have no exact information to place before you of the results of the work of these schools at this time. Perhaps they have not been in operation sufficiently long to warrant safe conclusions, but if the claims advanced can be verified by expert examination, deaf children should be placed under instruction in all our schools at a much earlier age than is now the case.

Fourth, The Day-School Movement. The remarkable extension of the day-school system of instructing the deaf may also be regarded as one of the present-day features of speech teaching. My personal experience of day-schools as affecting educational results has not been favorable, but their general permanency, their stated efficiency, and their constantly growing popularity require that just mention be made of their work as an active, efficient agency in the promotion of speech-teaching in various parts of the country.

In concluding his address Dr. Crouter paid a loving tribute to the great work for speech teaching done by Miss Rogers, of Northampton, whose kindly presence and deep interest in the proceedings was an inspiration to all.

Following Dr. Crouter's address there was a lecture by Dr. G. E. Curry, of Pittsburgh, on

DEFECTIVE VISION IN SCHOOL CHILDREN.

Dr. Curry said that as a result of the vigorous requirements of education in this age, perhaps no one organ is so overtaxed as the eye. He propounded the following questions:

(1). Is human eye-sight deteriorating?

(2). If so, to what may it be attributed?

(3). Are the eyes of school children specially subject to this deterioration?

(4). Do we possess a means of prevention and a remedy?

To the first and third of these queries, he responded in the affirmative. Of the causes of this deterioration, ophthalmic science undertakes an explanation; and as to its prevention and cure, it promises amelioration.

Statistics show that mental development is largely at the expense and loss of the physical. Uneducated races show much better physical conditions than those where the desire for knowledge and advancement is insatiable. This is particularly marked so far as ocular defects are concerned. In fact, it can be said that intellectual advancement and ocular degeneration are inseparable. Data compiled by Dr. Frank Allport, of Chicago, indicate that pure Mexicans rarely show refractive errors and the few deviations from the normal that do exist are found in the mixed races where there has been education among the ancestry. Fox, in his examination of the eyes of the Indians at Carlisle, found only an average of two per cent. of myopia or near-sightedness, and Callan's test of the eyes of negro children in New York schools showed about 2½% of myopia. In striking contrast to these figures, the eyes of the school children in American cities show 25% of myopia; while, if we look at the statistics of the Germans we find about 70% of the entire

population affected by this abnormal condition. It is also claimed that an even larger percentage of myopia is found among the Jewish race. This I do not think can be substantiated except that they engage mainly in sedentary occupations in contrast to the open air employments of other races.

Frequently we are confronted with the statement, "The farther south, the more normal the eye." This can be accounted for by climatic conditions which are conceded to promote indolence and mental inactivity. We find an almost invariable increase of myopia or near-sightedness and a decline of hyperopia or far-sightedness as educational opportunities are taken advantage of. That the myopic eye is very frequently capable of performing great labor at close range is clearly demonstrated; while the hypermetropic and astigmatic eyes can do the distant work with comparative ease and that close by with difficulty.

We all can recall many instances of the child believed to be dull, idle and listless, a trial both at home and at school, suddenly transformed into a bright, energetic and interesting pupil, owing to somebody having become cognizant that a pair of carefully fitted spectacles might be the solution of the trouble. This is so common an occurrence that the method of relief suggests itself, that is, a systematic examination of the eyes of school children at proper intervals. It does not seem advisable that this matter be left to the discretion of the parents, many of whom are not awake to the conditions, nor should the matter be referred to any optician whose viewpoint is oftentimes the commercial one of selling a pair of glasses. One mode of proceeding is to have a capable physician appointed by the proper authorities to examine the eyes of each child when admitted to school and at regular periods during the school course. This would involve a

salary and, unfortunately, political favoritism would often enter into the appointments. Another method might be adopted, requiring each pupil to present a certificate from an oculist of recognized standing, stating the condition of the eyes. The question of expense would perhaps cause this to be opposed. Perhaps all that is practical is to secure physicians of established reputation to deliver addresses to principals and teachers of schools, giving plain instructions, thus enabling them to test the vision; to note redness or local inflammations of the eye-lids and carefully record the same and report any that do not attain a necessary standard to their parents, with a recommendation that a competent oculist be consulted.

Light, air, and furnishings need the careful attention of those in charge. Light should come from the sky and as high above the pupil as the ceiling will permit. If at times artificial light must be resorted to, a sufficient number of electric lamps, properly shaded, and arranged with regard to the desks, are to be recommended, not only on account of the whiteness of the light but also because the air is not vitiated by their use. Proper seats are also an item of importance. Those conducive to an upright position with comfortable backs should be selected, but the uniformity we rarely fail to see in the schoolroom is not always a desirable feature, for the reason that in the same grade we have such diversity in size among the pupils. The placing of blackboards also requires attention. Care should be taken that no strain of the eye occurs in order to see. Some oculists insist that we should have, as a substitute for the present blackboard, a white surface on which black crayon is used. This would have the advantage of decreased reflection and also increase the distance at which writing could be read. Books printed in good type on reasonably thick paper are also essential. The Roman letters are decidedly

the best. Indeed, it can be positively asserted, were Germany to abolish her execrable type, she would largely free herself from her prevailing myopia. The question of vertical or slant writing may receive passing notice. While there is much diversity of opinion concerning this, the stronger sentiment tends towards the vertical system.

However, it is the continuous work, rather than the kind of work, that produces eye-strain. Teachers should exercise judicious care in regard to the occupations; should see that there is frequent change from desk work to recitations, and also allow intermissions.

VISIBLE SPEECH.

According to the verdict of many, one of the most profitable features of the meeting was the brief course of lectures given by Miss YALE on "Visible Speech." The work of Dr. Bell on the Mechanism of Speech was made to some extent the basis of the lectures. Miss Yale said that few systems had suffered so much at the hands of its friends as had Visible Speech; that it had been regarded as a mechanical toy, of no practical value to school work; that frequently normal students were inclined to look upon it as a set of hieroglyphics, as a dry subject to be hurried through with as rapidly as possible.

During the course Miss Yale gave many helpful suggestions to teachers as to how Visible Speech should be used in the classroom, saying among other things that it is now the consensus of opinion among teachers that the deaf child should not be given the symbols at all, but that the teacher should use the diagrams freely to represent the sounds taught. She said that in many cases not even a diagram is necessary, but that it is essential that the teacher recognize instantly defects in articula-

tion and be able to tell the child how to modify positions which have perhaps been right in the main.

Miss Yale cautioned all teachers of speech against the tendency to exaggerate positions when talking to the deaf. She said that too often the zeal of the teacher to help the pupil runs away with her knowledge, and that by way of apology for much poor speech in deaf children it might be said of the teacher, "Because she tried so hard, she wrought so badly."

In concluding her lectures Miss Yale said teachers cannot know too much of the natural formations of sounds, and that when they do know what perfect speech is and how sounds are formed, they are only just ready to begin to help deaf children to better speech. Miss Yale insisted that the only way to make the speech of deaf children better was for the teacher to get down to the very bottom of the facts of vocal physiology and really know themselves, and that then and only then would they really begin to do the work that American teachers of the deaf ought to do for the speech of their deaf children.

On Monday evening Mr. EDWIN STANLEY THOMPSON, of Mt. Airy, gave an illustrated lecture entitled "Ramblings in Rural England." For an hour and a half he entertained a large audience with charming English views and at the conclusion of his lecture demonstrated by a brief Italian journey the method he employs when using the stereopticon with the pupils of the Mt. Airy Institution. By means of alternating slides, on which he has written either with waterproof ink or a lithographer's pencil, he tells his audience in clear, concise English what the next view is to be, thereby making the stereopticon doubly useful to deaf children.

TUESDAY, AUGUST 28.

The first session opened with an invocation by Superintendent N. F. WALKER, after which Miss FRANCES W. GAWITH, of Northampton, read a paper on

GEOGRAPHY AND HISTORY FOR INTERMEDIATE GRADES.

Geography work in the Clarke School begins with the study of the surrounding region. There are rivers, mountains, hills, valleys, mills by the river, and little villages not far from it. A knowledge of this region is acquired by observation, while that of distant places is obtained from the teacher's description of journeys and places.

Pupils in the third grade have half an hour a day for geography. They learn what a plan of a town or city is, they use clay maps and wall maps, they learn the points of the compass, and how to answer the question, "Which way is——from——?"; something of the place in which the school is situated, the places where the members of the class live, the State and neighboring States, the bodies of water in this section, and the ocean on which it borders. Maps and geographies are kept in the playrooms and are constantly in use.

In the fourth grade three-quarters of an hour daily are given to the study of the plant and animal life of the earth. This work begins with the plants from which we get food, drink, clothing, building material, fuel, etc., followed by the study of the animals from which we get food, clothing, etc.

In the fifth grade the pupils study things found in the ground, as building stones, metals, coal, etc.; things found in the water, as whales, fish, coral, etc.; and the air and clouds around the earth. Finally stories of the children of the races are given.

In the fourth and fifth grades, the pupil must do something more in geography than mere memorizing. He must *reason*, for instance, that if a country raises more wheat than it needs it sells some of it. If another country buys this wheat it does not raise enough for its own use. If it does not raise wheat the climatic conditions are unfavorable, etc.

Animals are kept in the schoolroom and the children raise plants in the window box and in beds out of doors.

A text-book may be used in the third year of geography, but the work will be hard, for a good geography in simple language has not yet been written. By using a text-book pupils grow more independent in getting thought from the printed page, learn more technical terms of geography, get practice in the reading of maps, and learn how to study without committing to memory. The primary geographies of both Frye and Redway have been used for this grade.

The teaching of history is begun in the third grade with stories of a few men and a few events. These stories are retold each succeeding year more fully in connection with the national holidays. Such stories relate to the Pilgrims and the Indians, Washington, Lincoln, Paul Revere, the Battle of Bunker Hill, the Fourth of July, Columbus, Drake, Raleigh, etc., etc. The dates of a few important events are given, and other events are grouped about these. If little children are taught history in such a way that they "live in imagination the scenes of the past" and dead heroes are still living to them, this study in future years will bring to them the love of country, the influence of noble men which shall make of them better citizens, and, to a few at least, the genuine companionship of these great men.

CHART STORIES.

Miss YALE next gave a brief talk concerning the way in which they use chart stories at Northampton to enable the young deaf child to begin to read.

In the first year the theory is that the special work should be to put into language the child's own thought. The emphasis in the second year is the reverse of this, and consists in helping the child to get out of language the thought of another whether spoken or written, and this point is emphasized also during the two or three succeeding grades. Miss Yale exhibited several charts on which were printed in large, clear type simple stories such as would appeal to the young deaf child, stating that it was occasionally necessary to do some introductory work in order to help the child grasp the meaning, and that often pictures are used to enable him to build back and forward in point of time until he is able to make his own story. This usually remedies the defect.

Miss Yale read several of the chart stories, illustrating the manner in which they are used, and said that the children read and understand them but that they never commit the language to memory.

Usually the stories are read with the teacher one day and on the following the children are allowed to glance at the chart if they choose, after which they are asked at the most three or four simple questions about the story. The chart is taken away and they never see it again but they beg for another and they get it. Only about fifteen minutes are devoted to this work, which is intended primarily to arouse the pupils' interest in language. It is not intended that they should commit the language to memory because the language used is beyond them. But it makes a clear picture and children in their reading should not be held down to the constructions which they know how to use, as that would make dry reading.

Miss SUSAN E. BLISS, of Mt. Airy, read the following paper (here abridged) on

LANGUAGE WORK FOR INTERMEDIATE GRADES.

Through all grades in a well planned school for the deaf should run unbroken lines of language teaching, the warp which gives form, firmness, and durability to the whole fabric. History, geography, arithmetic—each weaves in its own special design, its own peculiar coloring, its own individual quality. But underneath and through them all run, of necessity, language and language teaching.

For present consideration our language work may be divided into two parts, namely, acquisition and use.

In the Pennsylvania Institution the fourth, fifth, and sixth grades are classed as intermediate, these numbers corresponding approximately to the number of years pupils have been under instruction. The methods used in these grades do not differ in essential points from those used in immediately preceding and immediately following grades. Lines between intermediate and advanced language work are as intangible as those drawn by geographers around the earth's surface. They are visible on our plans of work but invisible elsewhere.

Before the first of these lines is reached the deaf child's most imperative need is language with which to express his own necessities and desires, to recount his experiences, and to ask questions regarding persons or things that interest him.

Miss Bliss then summarized the extent of the language equipment with which the pupil comes from the primary into the intermediate department, stating that he is often disappointed when he finds no sudden change of intellectual scene to mark his entrance, and that the path at first leads up an ascent so gradual that he is hardly aware that the horizon is stretching farther from him and more

objects are becoming prominent in his enlarged field of vision. She called attention to the great need of teaching the child at this stage to use the language already acquired rather than to permit him to gorge himself intellectually without digesting what he learns.

Acquisition in the lowest intermediate grades gives place for a time to use. The threads already spun are sorted and classified; a detail is added here and there to a design already originated, but nothing radically new is, at first, attempted. This offers wide scope for tact, ingenuity, and skill on the part of the teacher. She is somewhat in the position of the housewife who on Monday finds herself with Sunday's roast on her hands as the basis for luncheons and dinners for half the week to come. She may rise to the occasion with menus varied and appetizing, or those under her care may wearily consume cold beef *ad nauseam*.

The first few weeks are devoted almost entirely to review work, making careful inventory of the pupils' stock of language, noting their weaknesses. Attempt is here made to teach the pupils to classify their knowledge to some extent. They learn to describe single objects in a few simple terms, the teacher helping them to discriminate between essential and non-essential details.

The well known index to Miss Sweet's Lessons in English, No. 2, forms the framework on which much of the formal language work in this grade and the next is shaped. In working up these principles many ways and means are used. Action work, story and picture work, questions and answers, letters and journals, all have their place, and in them all is emphasized the necessity of sorting and properly arranging ideas as well as words, the need of distinguishing between the important and the unimportant, the necessary and the unnecessary in both thought and expression. The ability thus to discriminate is not

likely to develop in the deaf child without careful cultivation. The average hearing child soon learns unconsciously to make for the point in the story he is telling. The deaf child has to be taught how to do so. Too much stress can hardly be laid upon the responsibility that is ours in this part of the work. Unconsciously if possible, consciously if need be, the deaf child must learn the current conventional language forms in which to clothe and convey his thought to others if he is to know the blessedness of giving as well as of receiving; and it is the teacher's part to help him realize that his thought, be it ever so beautiful or ever so forceful, must lose something of its force and much of its beauty if confined in a maimed and crippled sentence form.

By the middle of the second year more elaborateness of design and smoothness of construction may be noted in the pupil's original work. Reading is encouraged in all the intermediate grades. When a difficult form is necessary for the expression of a child's thought it is unhesitatingly given and he is led to use it as often as his need for it occurs.

In the third grade *use* is still the watchword though acquisition is not ignored. In the main the work seems but the elaboration of the old designs. Outlines are filled in a little more, a few softer shades are added to the colorings, and one at a time new threads are placed within the worker's grasp. Not too many at a time, lest in the yet unskilled fingers that receive them they become but a useless mass of tangles, hindering, not helping in the work. The intermediate pupil is not a skilled workman and only with much practice is he likely to develop into one. Familiarity with his language threads, accuracy of eye, deftness of finger must be acquired before he can take up to advantage the more elaborate work of advanced grades; hence, throughout all the intermediate grades the watchword must be PRACTICE.

The next paper was by Miss FRANCES WETTSTEIN, of Milwaukee, on

ARTICULATION IN THE INTERMEDIATE GRADES.

Miss Wettstein began her paper with a warm tribute to the teacher from whom she received her training, the late Paul Binner. She went on to say that the criticism that Europeans make regarding the articulation in America is its unintelligibility. This criticism, she said, comes not from one only, but from nearly all who have visited the schools here. Mr. Ferreri says, "It is enough if the child moves its lips and emits a sound, no matter how indistinct, which impressed me as a laryngeal mumbling;" and again, "The larva of speech which only the teacher herself understood by indulgence." Miss Schmidt, though she did not express herself so strongly, was of the same opinion. She says, "I am certain that teachers as well as pupils in America can still improve in articulation work." In a general way, they agree that we have mastered the difficulty of placing the voice, and have had good results in producing quite agreeable voices. But of what value is a well placed and smooth voice and fluent speech, if it is not intelligible?

Before Mr. Binner went to Europe, he laid special stress upon the proper formation of the consonants, but after he came back his verdict was the same as that of others, viz., that the articulation in Europe was far better than here in America, and he thought it was due to our not laying enough stress upon the proper formation of the vowels. After experimenting, he came to the conclusion that in the English language, as well as in all other languages, the vowels are the bearers of the word, and that upon their proper formation the intelligibility of a word or a sentence depends. The articulation can

be improved a hundred per cent. by giving the vowel its due value. The consonants are not to be neglected but after they have once been learned they are comparatively easy to give in words. With the vowels it is different. The difference between the vowels in knit and net, not and nut, Kate and kite, board and bird, is so slight that only the most acute sense of touch will detect the difference. For this reason it is essential to lay great stress upon training the child's sense of touch.

Besides resorting freely to the help of the hand, we have three principles which in general assist in the proper formation of the vowel. The first is, "Keep your tongue down." This does not mean that you should not raise the tongue in forming the "r" or "l" but rather that you should keep your mind upon the following vowel instead of upon the "r." If you think of the "r" you will prolong it and obliterate the vowel; while if you think of the vowel you will give a short, distinct consonant and a good pure vowel. This principle applies to all other consonants.

Secondly, place the point of articulation for each respective consonant as far forward as possible. This will bring the tone of the following vowel forward and help toward the formation of a clear tone.

Thirdly, in sounds which cannot be readily seen, draw attention to the lips instead of to the tongue in making corrections. When we tell the child to raise his tongue he will usually draw it back and give a guttural sound, while if we simply direct the movement of the lips, which he can readily see, his tongue will nearly always come forward and a clear vowel be the result.

Distinctness can be brought about by daily drill on the vowel elements that are very much alike and on the respective long and short vowels; also by rapid drill on difficult or similar vowel and consonantal com-

binations. Sometimes pupils are able to give the simple element but drop it or give it imperfectly in the sentence. For this it is profitable to give rapid drill on a sentence that contains the difficult elements repeatedly; as, "Round and round the rugged rock the ragged rascal ran," or, "She sells sea shells."

In order not to become so accustomed to the child's speech "that is only understood by the indulgent teacher" take a reading lesson with which the teacher is not familiar and let the child read so as to be understood by her. When the pronunciation has become perfectly intelligible to the teacher let some one else listen and tell what he understood. It will be astonishing to find how often the child is not understood when his speech seems perfect to the teacher.

Smoothness of voice, accent, phrasing, and fluency may be grouped under one head. Smoothness of voice may be obtained by singing the vowels ē ä u̇ ū; i, ow, oy, ow, ī, making a circle with your hand to indicate smoothness.

Accent is added by singing syllables, then short, smooth sentences and later simple songs.

If a piano is at hand, these exercises are made enjoyable, for the majority of the deaf love music, strange as it may seem. Their singing seems like a monotonous chant but there seldom are discords. The voices of children of a certain age seem to respond intuitively to a certain tone in the musical scale.

The accent in all this work should be marked but not jerky. We Americans have been criticized upon this point also. It was said that the speech of our pupils was more monotonous than that of pupils in Europe, and it was thought that we laid too little stress upon accent in the beginning. It was said that the German teachers used greater force. But does not too much force and too

great exertion on the part of one muscle have a reflex influence upon the action of others? If a child stamps his foot, or uses his arm very forcibly, and at the same time speaks the word, the word will also be forced and harsh. In order to obviate all jerkiness from the exercises, the motion of a large circle on the accented syllable and smaller ones on the unaccented syllables may be substituted for the beat.

Rhythm work and voice culture must not be permitted to take the place of the old fashioned drill on longer sentences, paragraphs, or a stanza of poetry. It is best not to let the children sing those songs or verses that they are to speak.

One of the points the articulation teacher must bear in mind is the modulation; and here her power is limited except with those who have, or with whom she can develop, sound perception. With the totally deaf, it is the sense of touch that will make him able to modulate his voice. By training the pupils to distinguish the difference on a musical instrument between the vibrations of a very low tone and a very high one, and then letting them observe the similarity of the vibrations in the throat, they will be able to modulate their voices a little; but here it is that the work with those who have sound perception is most gratifying. By sound perception is meant ability to hear the sound of a whistle or the music of a phonograph when reinforced by a tube that transmits the sound directly to the ear. This is sometimes called "the hearing that is of no value." If it is not developed, it is not of any value; but in nine out of ten cases, it can be developed so that the child can at least hear the vowels. This work does not necessarily take so much extra time. While the teacher is laboring to have a child get the correct inflection or emphasis, by simply taking the tube that ought to be hanging at her right

hand and shouting the word into the child's ear she may even be saving time.

Stimulating the nerve fibres to action by means of the acousticon, or by means of loud musical tones; then to make the child distinguish the vowels through the ear tubes, and later to make him hear the natural voice, or even to teach him to carry a melody fairly well, is not easy work by any means. It requires patience and perseverence and a spirit which demands no praise; for, often, such work is spoken of with contempt, as,—"O, yes, that child hears,"—or, "There are so many hearing children in that school." But the result is gratifying to the teacher who knows that the reward of a thing well done is to have done it.

All the work is done in vain if all the teachers are not constantly alert to the inaccuracies of speech; if they do not train their ears to become sensitive to errors, and if they are not persistent in their efforts to correct these. Every teacher who has the child in hand must insist upon that child's best speech at all times. She must not at any time permit carelessness to go unnoticed. She cannot at all times be improving that child's special difficulty—this must be done at special periods—but she can insist upon every element being given to the best of the child's ability.

The secret of success lies in perseverance, hard work, and determination to gain a definite end. What can be done elsewhere can be done here; we should show our European friends that we have profited by their criticism and that we *can* teach articulation and that we *will*.

Dr. ADOLPH KOENIG, of Pittsburgh, read a paper on

SCHOOL SANITATION AND HYGIENE.

After recommending careful daily inspection of institutions as likely to promote health and reduce mortality incident to contagious diseases, Dr. Koenig said there were many features of hygiene and sanitation, such as proper lighting, heating, and ventilation, to which it was scarcely necessary to refer. He nevertheless called particular attention to the matter of draughts, which he considers more baneful in their effects than air deficient in oxygen and contaminated with noxious gases.

The seats and desks in the schoolroom should be arranged with a proper regard to the light and should be adjusted to the size of the child, having regard for the height of the knee and the elbow. Either of these latter points being out of proportion may result in curvature of the spine or other defects antagonistic to good posture. He then quoted from a recent article in the New York *Medical Record* five essentials for the preservation of health in children, the gist of which may be thus summarized: ample rest, proper diet, fresh air, freedom from dust and exposure to disease, and freedom from worry and fatigue.

Many children, said Dr. Koenig, suffer from insufficient sleep, the time for which should be so arranged that the awakening in the morning should not be forcible and involuntary, but spontaneous. Neither should sleep be sought too soon after a meal, for the processes of digestion are much depressed during sleep.

A keen appetite for breakfast is evidence of a healthy condition of the body and *vice versa*. After a prolonged period of fasting represented by the time of sleeping, nourishment is demanded by the tissues of the body; hence breakfast should be a fairly substantial meal of a

readily assimilable character. Dinner should also be a substantial meal, whereas supper should consist chiefly of material easy of digestion. About an hour of rest should follow the midday meal, after which the tasks imposed should be of a light character for at least another hour. The periods of study should be broken by intermissions of exercise in the open air so that the muscular system may be developed. Brain tire, whether due to over-application or worry, should be avoided. When a condition of brain fag supervenes all effort should be relaxed, for then no lasting impressions can be hoped for, and progress is impeded rather than hastened.

Dr. Koenig spoke of the value of manual training, if not given too soon after the mid-day meal, as exercise calculated to aid rather than retard digestive processes.

Dr. Koenig next spoke concerning the importance of the character of the food of school children, saying that the needs of the human organism demand both animal and vegetable food, as is proven by long experience as well as by the character of the teeth. After discussing the relative values of various food products, Dr. Koenig said in conclusion that the subject of bathing was one which is looked upon with considerable difference of opinion, but that it was possible to err at both extremes, and expressed it as his opinion that those who bathe oftener than twice a week might do well to adopt in a measure the method of inunctions of the ancient Egyptians, Greeks, and Romans, whose predilection for bathing is well known.

Mr. RICHARD O. JOHNSON then read a paper (here abridged) on

DEFECTS OF CHILDHOOD.

For a number of years four defects of childhood, viz., adenoid growths, enlarged tonsils, defective eyesight, and defective teeth, have been pretty thoroughly discussed by specialists within and without the medical profession.

The average parent sees no farther than his own family—and he sees not clearly his own. The inevitable results of these defects may present themselves but are considered "natural and to be expected," and nothing is done for their relief. Therein lies the pity! The child may die from these defects, frequently does though other causes are assigned, but living he suffers mentally, physically, and often morally.

Pharyngeal tonsils (adenoid growths), a spongy blood-filled mass in the naso-pharynx, and enlarged faucial tonsils tend to closure of the pharyngeal opening of the Eustachian tube. This causes abnormal atmospheric pressure upon the ear drum from without, produces inflammation within the middle ear cavity, and the formation of pus for want of proper ventilation and drainage through the tube, resulting in abscess and puncture of the ear drum or escape into the inner ear, causing nerve deafness and a long list of other complaints. This tonsillar enlargement is an important factor in disease, interfering with nasal respiration, with perfect mobility of the uvula, and with perfect phonation. It commonly results in inflammation, tonsillitis, quinsy, rheumatism, etc., affects the general health, and through extension of inflammation to and partial closure of the Eustachian tube causes total or partial deafness. To say the least of it, this enlargement is a source of much discomfort, and an operation that usually takes but a few minutes will generally result in better health and greater physical development, if nothing more.

The symptoms of adenoid growths are numerous and vary in different children but in nearly all cases the faucial tonsils are enlarged, and one specialist asserts that to him enlarged faucial tonsils are proof positive of adenoid growths without further examination.

Mr. Johnson said that most ear diseases are caused by affections of the naso-pharynx, perfect hearing depending upon free ventilation of the middle ear, and quoted statistics to show that ear diseases are much more common in young children than is generally supposed. He claimed that correct diagnosis and prompt and efficient treatment in cases where ear disease exists would probably prevent partial or even total deafness, and perhaps even save the child's life.

After quoting recently compiled statistics as to the prevalence of defective hearing and of defective vision among public school children in different parts of the country, Mr. Johnson said:

Alarmingly large percentages of backward and feeble minded children upon examination have been found to be afflicted with deformities of the eyes impairing vision, all of whom evidenced marked improvement, mentally and physically, when defects of sight had been corrected. In many instances insubordination, truancy, and viciousness have been successfully overcome by the prescription of correct glasses.

A thorough examination of our public school children throughout the country would disclose an alarmingly large proportion of pupils who lack the proper perception of speech sound, who are practically deaf to certain elementary sounds, and to whom ordinarily modulated speech must seem in consequence a confused jumble or unintelligible mumbling. It would be found also that defective eyesight is most prevalent. Without knowledge on the part of teacher and pupil of the latter's deficiency,

the child stumbles along through the grades, displaying that which is unjustly styled natural stupidity. The remedy for such a state of affairs is plain and simple. There should be a State law everywhere requiring an examination of the hearing and eyesight of all school children at least once in three years, as is now the case in Connecticut. There would then come about better knowledge of the possibilities of prevention of ear and eye deficiency, proper treatment would be prescribed, and this most common evil reduced to a minimum, nervous exhaustion would be relieved, better health would result, and greater educational progress would be made.

Mr. Johnson called attention to the importance of the care of children's teeth as a safeguard against disease and then concluded his paper by saying it was the duty of parents to give heed to their children's welfare by having the adenoid growth and the enlarged faucial tonsil removed as early as possible, to have the eyesight safeguarded by the prescription of correct glasses, and to have the teeth cared for in proper manner. If parents are unable or neglect to do these things for their children, then the State should attend to them for its own protection.

At the conclusion of Mr. Johnson's paper—

Dr. CROUTER said that in the majority of cases operated on for adenoid growths, an improvement in the general health of the child was the most that could be expected.

Dr. WESTERVELT said that two children in the Rochester School had their hearing so much improved by the removal of adenoid growths that they were afterwards able to attend the public schools, but that in most cases only the general health was benefited.

Tuesday evening from eight to ten the officers of the Institution gave a reception in honor of the members of the Association. During the latter part of the evening there was an informal dance which proved to be an enjoyable affair to all present.

WEDNESDAY, AUGUST 29.

After prayer by Dr. TATE of Minnesota, Mr. HARRIS TAYLOR, of Kentucky, read a very interesting paper on

THE USE OF PICTURES IN ADVANCED GRADES.

After speaking of the value of pictures as an educational factor in advanced work as well as in the primary and intermediate grades, Mr. Taylor criticised the illustrations usually found in geographies as being poorly engraved, badly printed, wrongly grouped, antiquated, selected in a haphazard way, and often of subjects most trivial. He gave many amusing illustrations of the misleading and often absurd impressions conveyed to the pupils by these pictures.

Verbal description is not sufficient when the pupil is on unfamiliar ground. The local scenery does not furnish all that is desired in the way of land and water formations, animals and plants, habitations, industries, and products. Pictures in many cases are the best aids and in some cases the only aids. What you want is rarely in the text-book. If it is, it may be so inaccurate that you wish it were not. Pictures are needed, many pictures, and for most of them you must rely on other sources than the text-book.

Pictures are of no less importance in teaching history. Pictures of historic persons, places, buildings, weapons, defences, battles, dress, habitations, amusements, etc.,

help to illuminate the text, which under the most favorable conditions is often none too clear. Pictures should not be used to take the place of thinking, but to give bases for more accurate thinking.

Pictures are used extensively in the advanced department of the Pennsylvania Institution, probably more extensively than in the advanced grades of any other school for the deaf.

The credit for beginning the collection of pictures for school-room use in the advanced department should be given, I think, to Mr. Edwin Stanley Thompson. Miss Grace L. Wright should receive most of the credit for the arrangement and classification.

In the Pennsylvania Institution there are about 7,000 or 8,000 pictures mounted on manilla cards, eight by ten inches. One or two thousand are mounted on cards large enough for a full-page illustration from Harper's or other weeklies. On still larger cards there are hundreds of double-page illustrations from Harper's and similar publications. The magazines often contain excellent illustrated articles on travel and history. These are put away in stiff manilla envelopes of the same dimensions as the smallest cards. All these pictures and articles are indexed and filed in cabinets where they are accessible at a moment's notice. All these mounted pictures and several thousand not yet mounted are intended for use in the departments of geography and history; but their worth in language teaching is not to be ignored.

Old magazines, daily and weekly papers, souvenirs of various places, railroad booklets, advertisements, and worn-out books are sources from which pictures may be obtained. The work of collecting, selecting, cutting out, pasting, and indexing is not easy; on the other hand, the expense is not great. The same spirit that animates the collector of stamps, coins, or autographs will soon

affect the teachers who begin the collection of pictures for school-room use. The zeal of the collector is theirs. Once inspired by this zeal, they will find ways and means of collecting a large number of pictures.

There is also an unusual collection of lantern slides at the Pennsylvania Institution. Nearly all of these slides were made by Mr. Thompson, who is a great traveler and a good photographer, and who is never so happy as when he is oozing information from every pore. The teacher of geography and the teacher of history can attest to the profit and delight these slides have afforded their pupils. One of the language teachers recently said that she got more constructive language from the stereopticon entertainments than from any other source.

The next paper presented was by Mr. A. U. DOWNING, of the Western Pennsylvania Institute, on

ARITHMETIC: THE EQUATION-ANALYTICAL METHOD.

The statement has been iterated and reiterated that arithmetic occupies in our school courses a position of exaggerated importance. Such criticism is not justified by the facts. If arithmetic has failed in the past to serve as a vehicle for original thought on the part of the pupil, the reason is it has not been properly conceived and presented. The trouble lies with the teacher and not with the science. The remedy must therefore come from the schoolmaster. Any method, to meet requirements, must be made up of related facts or it is not method at all. The method I have adopted in teaching arithmetic concerns itself only with the manner of working problems in a rational way. Its merits in the main are:

1. It is systematic. By it a pupil follows natural processes and when he has solved the problem, he has done it by a systematic line of reasoning that can scarcely fail to produce the desired result. Step by step he moves through the various principles involved, and confidently he comes to the end.

2. Oral explanation on the part of the pupils is wholly unnecessary. The finished work stands as a complete whole. Every principle is applied in its proper place; everything has its proper label. The method is a *time saver.*

3. The pupil's idea of values becomes clear. A false statement soon becomes apparent even to pupils of less than average intelligence. The method corresponds to equations in algebra. It is a system of equalities and the sign of equality (=) is designed to be used in place of the complete language expression in higher classes in order to facilitate work.

4. It provides numerous opportunities to impart correct and difficult language forms.

5. The method arouses the pupil's interest.

6. It begets confidence a trait, so desirable and yet so rare. Problems that are difficult of solution, when undertaken in other ways, become comparatively easy by this method. The pupil's preliminary drill in comparison of values stands him in good stead now, for he has begun to understand how to reason his way through the solution step by step. He no longer depends on the teacher but sees for himself and understands.

7. The finished solution presents a much neater appearance and is much more easily traced than haphazard ones. Too many teachers grow lax in the matter of neatness, especially as the pupil nears the end of his school career.

Mr. Downing then demonstrated his method in actual practice by means of problems involving operations in

compound numbers, common and decimal fractions, profit and loss, interest, and compound proportion, Miss Austa Mays, one of his pupils, having worked them on the wall slates during the reading of the paper.

The following are selections from the problems presented:

Problem 1. At $\frac{1}{5}$ of a dollar per yard, how many yards of ribbon can be purchased for $\frac{3}{4}$ of a dollar?

Solution:—$\frac{1}{5}$ of a dollar is paid for 1 yard.

$\frac{5}{5}$ or a dollar is paid for 5×1 yard $= 5$ yards.

$\frac{5}{5}$ of a dollar is the same as $\frac{4}{4}$ of a dollar; then, $\frac{4}{4}$ or a dollar is paid for 5 yards.

$\frac{1}{4}$ of a dollar is paid for 5 yards $\div 4 = \frac{5}{4}$ yards.

$\frac{3}{4}$ of a dollar is paid for $3 \times \frac{5}{4}$ yard $= \frac{15}{4}$ yards or $3\frac{3}{4}$ yards.

Answer:—Three-fourths of a dollar will buy $3\frac{3}{4}$ yards of ribbon.

Problem 2. Reduce 2 yd., 2 ft., 7 in. to inches.

Solution:—1 yard contains 3 feet. 2 yards contain 2×3 feet $=$ 6 feet. 6 feet $+ 2$ feet $= 8$ feet. 1 foot contains 12 inches. 8 feet contain 8×12 inches $= 96$ inches. 96 inches $+ 7$ inches $= 103$ inches.

Answer:—2 yd., 2 ft., 7., in. contain 103 inches.

Problem 3. A merchant's profit on a piece of cloth that cost \$40 is 10%: for how much does he sell it?

Solution:—Cost $100\% + 10\%$ profit $= 110\%$ selling price; then 100% is equal to \$40. 1% is equal to $\$40 \div 100 = \$.40$. 110% is equal to $110 \times \$.40 = \$44.00$. He sells it for \$44.00.

Problem 4. If 180 men in 6 days of 10 hours each dig a trench 200 yards long, 3 yards wide, 2 yards deep, in how many days can 100 men working 8 hours a day dig a trench 180 yards long, 4 yards wide, and 3 yards deep?

Solution:—180 men can do the work in 6 days. 1 man can do it in 180×6 days $= 1080$ days. 100 men can do it in 1080 days $\div 100 =$ 10.8 days. By working 10 hours a day it can be done in 10.8 days. By working 1 hour a day it can be done in 10×10.8 days $= 108$ days. By working 8 hours a day it can be done in 108 days $\div = 13.5$ days. A trench 200 yards long can be dug in 13.5 days. A trench 1 yard long can be dug in 13.5 days $\div 200 = .0675$ days. A trench 180 yards long can be dug in $180 \times .0675$ days $= 12.15$ days. A trench 3 yards wide can be dug in 12.15 days. A trench 1 yard wide can be dug in $12.15 \div 3 = 4.05$ days. A trench 4 yards wide can be dug in 4×4.05 days $= 16.2$ days. A trench 2 yards deep can be dug in 16.2 days. A trench 1 yard deep can be dug in 16.2 days $\div 2 = 8.1$ days. A trench 3 yards deep can be dug in 3×8.1 days $= 24.3$ days.

Answer:—It will take them 24.3 days.

In conclusion Mr. Downing said:

The first thing to determine in solving a problem is the thing required in the answer, whether dollars, or men, or days, etc. Having ascertained this the pupil must be impressed with the necessity of always placing the term required in the answer on the right. In some problems the same final term must be used in each equation as in the one in compound proportion already given. In others the last term in the first and succeeding equations may not be the term required in the final answer, but will lead up to it. The adjustment of this is a matter of detail that the teacher should apply in his own way. He should insist, however, on the pupil's giving the different numbers their proper names. The pupil may protest that this is unnecessary, that he understands it, and so on, which is generally another way of confessing that he really does not feel sure when he attempts to do it. The teacher should demand thoroughness of detail, and he will be guilty of disregard of duty if he permit the chance to escape. I should even insist on having the words in the different statements or equations written out in full, at least until the pupil overcomes the habit of using the singular and plural forms indiscriminately.

Finally I wish to say that the analytical method, as it has been used in my own class-room for a number of years, has proved the greatest aid to me in all kinds of problems. Naturally, then, I have become thoroughly convinced of its merits.

Mr. Edwin Stanley Thompson, of Mt. Airy, then read a paper entitled

FEEDING THE WORLD,

the central idea of which was to suggest how facts and figures may be used to supplement text-books. The paper contained an array of interesting and curious facts which clearly illustrated how an adroit teacher can handle statistical information in such a manner as to awaken interest in what is often a dry subject.

After stating that the wants of man are food, clothing, and shelter, Mr. Thompson told of the simple food supplies that are sufficient for the savage and half-civilized peoples of the earth, and then described somewhat in detail the way in which the food supplies of civilized peoples are obtained, showing how man, as he advances in civilization, demands a greater variety of food and draws upon the whole world to supply his wants, thereby giving employment to millions of men in the production and distribution of the necessities and luxuries of life.

Mr. F. W. Booth then read the following paper (here abridged) on

NORMAL TRAINING FOR ORAL TEACHERS OF THE DEAF.

Little more than a generation has passed since the methods of professional training were such that it was obtainable only in the kind and measure that it could be given by one person to another. The young law student read law in the office of some local practicing attorney; the medical student read medicine in the office

of the family physician. There was but little teaching by this system, for the nominal preceptors had little time to teach and even less time to study and prepare themselves for teaching. A crude, slow, wasteful system it was, and it went fittingly with the other slow-going, time and strength consuming processes of its day, the day of the stage coach and the canal boat, of the sickle and the flail, of home-spun, home-woven clothing. In the solidarity of social, business, and industrial practices, they all went together, and naturally they all passed away together. But what has come in their stead? The answer may be given in a word—the factory, the factory principle and system in everything. What the factory system has done for mankind in the production of material things and comforts, the principle in practical applications of it has done for men in providing professional training of high order.

But what of pedagogy as a profession, and of the training afforded for it? Has it, too, come under the full dominance of the spirit of the age? The Normal Schools and Teachers' Colleges are our sufficient answer. Pedagogy has risen to the rank and dignities of a profession. Fortunate indeed are our children, for school opportunities and privileges and a quality of teaching are theirs that their parents neither knew nor dreamed of.

But while the principle of provision of thorough training for the profession of pedagogy is to-day generally recognized as the highest wisdom, our own work has, as yet, experienced only a partial, restricted application of the principle. It is within the recollection of us older teachers that the saying that every new teacher spoiled at least his first two classes was accepted not only as a truism, but as a truism in accord with the very nature of things. It was not until our special pedagogy broadened to include the giving of speech to the dumb, and ability to read

speech on the lips to the deaf, that preliminary training for the work was recognized as an imperative necessity for its successful prosecution.

But the work has, in reality, enjoyed the benefits of but a restricted, superficial application of the principle in the actual training work attempted and accomplished. We have fashioned our training methods largely upon the old-time law-office, doctor's-office plan, making training available in that kind and measure that one teacher has been able to give to another. This individual instruction, as given, was necessarily of brief duration, rarely more than three months, with lessons of an hour or so daily, and exhaustive—if so in any sense—only as relative to the resources and ability of the instructor giving it.

It may be said that the method of teacher to teacher training was born of necessity; therefore, that it has necessity for its excuse and justification.

But has not the work outgrown this altogether inadequate method of training? Has not our pedagogy reached a stage in its development to require advancement to bring it upon a level, in its aims, breadth, and scope, with the training afforded for other professions? Shall we not have for our profession all the advantages in training that other professions are enjoying in the thorough courses provided in their training schools and colleges, and thereby have our teachers, at the very entrance upon their life work, accredited masters of it, and equipped, so far as training can equip them, for the doing of highly successful work from the start? I can imagine no answer in the thought of any one that is not affirmative to all these questions.

Nor would I overlook the fact that for years we have had training work of the highest order and effective to a most satisfactory degree; but, unfortunately, it has been a restricted work, restricted by force of uncontrol-

lable circumstances to narrow limits and a meagre output. "A little leaven leaveneth the whole lump." That is a true saying, for it is scriptural; and it is quite as true in its non-scriptural as in its scriptural applications. But it is necessary that, even with leaven, proportions should be maintained. So, while we have had most excellent training schools, with thorough courses, their output has been too insignificant from the numerical standpoint to have appreciable effect, except in spots, upon the great body of teachers and the work done by them. But while this little leaven has had but an inappreciable effect upon the great mass of the *work* of the profession, it has had effect, and profound effect, upon the *thought* of it, and the training done, limited though it has been, has had widespread recognition and appreciation. The judgment of the profession is wholly in its favor, as it is wholly condemnatory of the training work that has been heretofore accepted as but a compulsory choice of evils. Our work is to-day on the threshold of a movement destined to revolutionize our training work and to bring it all under normal school and training college direction and control. This revolution accomplished, the time will have arrived, and speed the day, when it will be an impossibility for a teacher to gain entrance to our profession without a certificate in hand of graduation from an accredited normal school. We are what we know and think, and we know and think, in much the greater part, what we have seen and experienced; therefore the importance in normal training work of experiment with successful work in actual continuous contact with it and participation in it. Without this experience, normal training is but an academic theory. Therefore, let our schools for training teachers be established and maintained at the seats of successful schools, and there only; schools successful moreover in that measure always that they are known

to do superior work with every grade of children.

Mr. Booth then spoke briefly of the enlargement of the Normal Training Department at Northampton and the good results upon speech teaching that will naturally come therefrom, increasing as it will the material output and in corresponding ratio the leavening power of that school. Mr. Booth did not wish to be understood as implying that leavening power and virtue are thought local to this single school. The special activity to be put forth at this time is to be localized and centralized in order that it may be safely and surely effective, since to dissipate energy is usually to waste it.

In closing, Mr. Booth said: I cannot help expressing the hope that the progress of the profession in its education on this subject of training of teachers will go right on indefinitely, to arrive at that stage soon when there will be no training, absolutely none, in any degree approved, much less accepted, that is not of the normal school or teachers' college order and grade.

Superintendent JONES, of Ohio, then read the following paper (here abridged) on

THE EDUCATION OF THE DEAF-BLIND,

WITH SPECIAL REFERENCE TO LESLIE OREN.

To the casual observer the education of a deaf-blind pupil is a great undertaking, requiring the most careful preparation of a teacher after nature has endowed her with unlimited patience and unswerving perseverance. But in reality this is not so. The same great principles that underlie the education of children in general apply with equal force to the education of the deaf-blind, and

nothing more. The successful teacher of hearing children will, after she has learned the manual alphabet, which requires but a few hours, have no more trouble in teaching the deaf-blind than she had in her school of normal children. No more patience, nor tact, nor skill is required and, in fact, not so much, as the element of discipline is eliminated and the work is reduced to preparation and instruction. Likewise the poor teacher of normal children will find her work a failure in the new field of the deaf-blind. While much depends upon the teacher, great result does not depend upon her entirely. The mentality of the pupil must be taken into consideration. The strongest teacher will fall short of astounding results if her pupil is dull and sluggish in intellect. The ideal school is the strong teacher and the bright pupil. This has been illustrated by Laura Bridgman, Helen Keller, Oren Benson, Tommy Stringer, Lottie Sullivan, Leslie Oren, and their respective teachers.

The instruction of the deaf-blind who had acquired language before they lost their hearing and sight later is comparatively easy. The difference between their instruction and that of hearing-seeing students is only the difference between using nature's intended instrument, the voice, and nature's best substitutes, finger spelling and raised print.

The deaf-blind whose affliction occurred before language had been acquired present a different problem to the teacher. She must begin at the beginning of things. They have neither the medium nor the instrument of conveying thought. The vessel, the mind, is there for receiving and giving out impressions, but there are no language, no words, no letters, not even signs beyond those of the brute animal without the brute animal's instinct. The pupil cannot hear the teacher's voice nor see her motions. In all probability, it does not know

that there is a language in existence, and surely knows nothing of arbitrary characters, the manual alphabet, for expressing that language.

Leslie Oren was in this condition when he was brought to the Ohio Institution in September, 1898, and turned over to his teacher, Miss Ada Lyon. Miss Lyon was entirely unacquainted with the special work of educating the deaf or blind. She had never seen either class of child instructed. She had never seen a deaf-blind child and until six weeks before she began her work with Leslie did not know the manual alphabet. But she had been a teacher in the public school; she had been a student of methods and had had some pedagogical training after the spirit of independent normalism. Leslie had lost his hearing and sight at two years of age before he had gained a knowledge of more than the simplest language and this he had soon forgotten. It is an old adage in Ohio that man can be reached most easily through his stomach. It was so with Leslie. In fact, it appeared to be the only way. Miss Lyon was his matron and mother as well as his teacher. They were together all the time, eating at the same table and sleeping in the same room.

The work was necessarily slow for some time but he seemed to realize from the first that she was his special friend and attendant. So, when meal-time came, she gave him the conventional sign for "eat." He seemed to grasp the meaning at once and gave it himself. She then substituted the manual spelling e-a-t for the sign. He soon got that. While, of course, he did not know the significance of the finger movements, his teacher taught him to make e-a-t, and while he did not know that they represented letters that he would have to make always, he made them to indicate that it was meal-time. So she taught him the names of articles of food, each word becoming easier as Leslie's interest and understand-

ing grew, and it soon dawned on him the letters had a real significance. From the first he liked to be outdoors and to walk, although he could not walk very well. He had to have his hat and coat when he went out, and there was the opportunity to teach "walk," "hat" or "cap," and "coat." He learned these quickly. He took delight in visiting the friends that he and Miss Lyon were making and learned the word "visit" as he had "walk." Also the names of clothing, "new coat," "clean waist," "soiled waist," "red tie," "new shoes," "stockings," "overcoat," etc., all of which had something to do with the visit. In this way he learned that people, places, things, and actions have names, and his vocabulary was built up with amazing rapidity. From that time it has been a matter of showing, telling, directing, and instructing. He has been and is learning as other children do. He quickly learned the raised letters. He learned the several kinds of point print so well that he does not confuse them. He became familiar with the typewriter in a very few days, learning not only the keys with their respective positions so he could operate them without having the raised letters on them, but also the parts and mechanism of the machine. He can write from thirty to forty words per minute.

He has surprised us by showing unusual reasoning powers for a boy of his age. He was learning the names of the month. It was March. At the same time he was writing a daily journal after this fashion: "We arose at 5.30 o'clock. We dressed ourselves, and washed our hands and faces. We combed our hair. We marched into the dining-room. We ate our breakfasts. We marched out," etc. April came and Miss Lyon explained the new month and told him March was gone and would not come again for twelve months. He understood. The next morning he produced his daily journal. The

rising, dressing, and washing were as on previous days. Then came the statement: "We mar- no, we apriled into the dining room, ate our breakfasts and apriled out." He had learned the word "march" at the same time he had learned the name of the third month. So when April came he drew the same analogy.

Since his coming to the Institution he has enjoyed invitations to take Sunday dinner with Mrs. Jones. Those invitations came irregularly at first. On one April 7th as he finished his dinner and gave Mrs. Jones the usual kiss, he spelled on his fingers:—"I will take dinner with you again on April 21st." He was only eight years old and we were surprised that he had located the date exactly two weeks ahead. Upon a little reflection we remembered it had been just two weeks since he had taken his dinner with us. Again the working of the little fellow's mind was seen to be along the line of precedents.

Once he came to dinner uninvited. We asked who had invited him. He said nothing but looked blank. "Did Mrs. Jones?" "No." "Did Mr. Jones?" "No." "Did any of the children?" "No." "Who invited you then?" And he spelled "G-o-d." It is needless to say the invitation was honored. He had not yet been taught the orthodox belief that it is the devil who makes us yield to our will. And so for several years his answers and suggestions have been a surprise to us. They are always interesting and sometimes exceedingly amusing. They all show the working of a bright human mind drawing its inferences, analogies, and conclusions from the crudest premises. But these are all the child has and it is much to his credit that he uses them to the best of his ability.

It is by this use that he learns the truth. He often looks chagrined when he has drawn a ridiculous conclusion and sometimes laughs heartily at it when he is told about it.

As a matter of necessity the beginning method of

educating a deaf-blind child is inductive. It was especially so with Leslie for the first six years and is much so yet. He was so eager for information that he wanted to devote his whole energy to securing it, and almost refused to give out any he already had. By degrees only has his teacher been able to overcome this difficulty and make him understand that his mind will grow only by making use of it in imparting the information he has. He wants his mind to grow so he may be like certain men he knows. When he is reminded of them he will do his best to write and talk. He is now being taught by both the inductive and deductive methods and his progress, always marvelous, is increasing with his age. From the first he has abhorred the learning of speech, and, while his voice is good, we feared for a while that he could not be interested in it. But patience at last triumphed and he is making recently a strong effort to learn to talk and is succeeding very well. In all of his work in language, in history, in geography, in arithmetic, and in elementary science, he has reached the point which gives every assurance that the extent of his education will be in proportion to his opportunity. To achieve this he has had the blessing of nature in mental endowment and the good fortune of a devoted, capable teacher. Miss Lyon has worked out her own methods, directed her own efforts, and the results belong to her and her pupil.

In this great work the living benefactor of the deaf-blind, Mr. William Wade, must be taken into consideration. His ready interest and cooperation have been a continual inspiration to all. His willingness to provide equipment without stint or limit, the opportunity he has furnished teachers and pupils for travel, his keeping in constant touch with teachers through correspondence and visits, have not only served the important purpose of advertising what can be and is being done for such unfortunate children, but has made the teaching itself doubly effective.

What would the results have been had a lazy, indifferent, careless, easily-discouraged, excuse-finding woman been Leslie's teacher? She might have had the highest and best training, but what would you have expected? Good results are for the strong teachers individually. Training is a good help. But individuality, force well directed, faith, love, patience, every-day perseverance, these and these only bring results. What a great blessing it would be to the children in our public schools, special schools, private schools, colleges, and all schools if all teachers were of this kind.

At the conclusion of Mr. Jones's paper Miss Lyon and Leslie came to the platform. By means of manual spelling he told of his visit to the Heinz Pickle Factory and, in response to the inquiry as to what he had to eat, amused the audience greatly by enumerating what appeared to be the greater number of the celebrated fifty-seven varieties.

Leslie spoke orally a number of sentences in a very clear and intelligible manner; among other things he said: "I am happy to be here to-day. I cannot see you, I cannot hear you, but I know you have come to see me. I do not want to be a dumb man. I want to be a wise and good man. I love you. I kiss you good-bye."

This last statement was accompanied by a kiss thrown to the audience.

Thursday, August 30.

On Thursday morning Dr. Burt conducted a large party of the guests on a tour of inspection of the various departments of the Institution, after which the opening

session in the chapel began with prayer by Superintendent Jones, of Ohio.

Mr. Booth read a paper, of which the following is an abstract, written by Mr. SAMUEL G. DAVIDSON, of Mt. Airy, on

THE PROPER TREATMENT OF THE VERB.

THE verb is the most important word in a sentence, and because of its nature, the great variety of its uses and forms, it is the most difficult for the deaf to master. The errors they make in this one part of speech are usually more numerous than those in all the other elements of the sentence together. Years ago an analysis of the mistakes in English made by the advanced grade pupils of the Mt. Airy School showed that more than seventy-five per cent. of them were in the use of the verb. Through persistent drill, improved methods, and co-operation among the teachers this proportion has been reduced until it is less than twenty-five per cent. with the dullest, most backward pupils. At the same time the advance in the correct use of language in general has been such as to suggest the advisability of making the verb the center of instruction in all the elements of the sentence. Drill on the verbs, if sufficiently broad and thorough, will incidentally give exercise on all the other parts of speech in every variation of form and usage, and in natural proportions.

Certain faults in the use of the verb that manifest themselves in advanced work, and that are extremely difficult to overcome, are the consequence of faulty teaching in the lower classes. The perfect tenses are not taught as soon as they should be from a mistaken idea that they are difficult to make clear to young deaf children, and the pupils are not only permitted, but are taught,

to use the past tense where logically and according to usage the present perfect or the past perfect is required. No amount of later drill will break them of the habit thus formed. The teacher should not hesitate to use the perfect tenses with her pupils when the idea to be expressed demands it, and she should explain them and drill upon them as soon as understanding of the simple tenses makes it possible. They should certainly be introduced not later than the *asked, said,* and *told* constructions, as being necessary to the proper correlation of the verbs in such sentences. The offices of the perfect tenses and the correlation of the tenses may be made clear to the child by the use of five wall slates, one for each tense, by which the relation of the verbs as regards time are shown by the position of the slates with reference to one another.

The passive voice should not be taught by translation from the active, as this confuses the pupil as to the purpose of voice and in the use of the forms. The subject regularly comes first in a statement and, according to whatever the subject acts or is acted upon, the verb must be active or passive. This may easily be made clear by action work, and an understanding of it would prevent many of the absurdities that appear in the speech and compositions of the deaf. Care should be taken, also, that pupils do not misconceive the word *by* as a necessary accompaniment of the passive voice. This is one of the false ideas drilled into them by translation from the active.

The teaching of the verbs should be hastened so far as is consistent with thoroughness and avoidance of confusion, and drill upon them should be persistent and continue until the day of graduation, for the school course is none too long for our children to master them. Teachers should study carefully the nature of the verb, its uses, its forms, its relations to other words, the special difficulties it presents to the deaf child, and the best methods

of overcoming them. Many teachers have extremely hazy ideas on the subject, and they are frequently misled by what they have studied in their school grammars. These were prepared for hearing children who already had language, not for the deaf who are learning it, and their treatment of the verb is often illogical and inconsistent.

The following resolution submitted by Superintendent WALKER, of South Carolina, and seconded by Dr. WESTERVELT, was then passed by the Association:

Resolved, That the training of the teachers of speech to the deaf should include a thorough knowledge and working command of Bell's Visible Speech symbols.

A paper entitled

WHAT WE HAVE DONE IN OUR LIBRARY CLUBS

was read by Miss CANDACE A. YENDES of the Western Pennsylvania School.

After speaking briefly of the importance of cultivating the reading habit in our pupils, she told how the library clubs had been organized and successfully carried on in the Edgewood School.

They have been organized about three years and the work accomplished as a whole has been very satisfactory.

The Boys' Club is in charge of Mr. B. R. Allabough and the Girls' Club in charge of Miss Frances Barker

and Miss Yendes. They meet separately every week, and a Secretary and Librarian in each keep a record of attendance and of books taken and returned.

The first thing to be done was to create a demand for the books, and this was accomplished by the teacher telling the story quite briefly, giving its salient points and perhaps a few facts with regard to the author, if a well known one.

The pupils were taught at the start to discriminate between history and fiction, to classify books according to subject, as biography, history, travel, fiction, and so on; also to look for the principal characters in the story, especially the hero and heroine.

In questioning them about what they have read, the first question is generally, "Is this story true?" Then some queries as to the time and place in which the scenes were laid, if they had any bearing upon the story or any importance of themselves.

At the same time the author's other works, if any, were mentioned and if possible were shown them, also any available clippings or pictures of the author, his home, or anything of interest connected with the subject.

It was observed that a poorly bound book, with small type, narrow margins, and no illustrations, however suitable otherwise, was often passed by for one more inviting in appearance, which proves that books to be popular should be as attractive as possible in binding and typography.

The work of the Library Clubs was co-ordinated somewhat with the class work and the other teachers of the school have testified to the benefit of the work on their classes. The pupils come to these teachers for books of reference and for further study along the lines of their regular tasks in school.

The American Book Company and the Educational

Publishing Company were cited as among the most progressive publishers of juvenile literature and a list of desirable books for institution libraries was given.

The Five and Ten Cent Classics were recommended for use in Reading Clubs where enough duplicate copies are not to be had in more substantial binding.

The Children's Library in the Western Pennsylvania Institution numbers about fourteen hundred volumes of choice books purchased from its Carnegie Fund, which yields an income of about $250 per annum; but the pupils are not dependent upon these alone, for there is a large Carnegie Library located at Braddock, which is within easy access from Edgewood by trolley; and Dr. Burt has enlisted the co-operation of the librarian there and secured permission for the teachers having charge of the Library Clubs to go there as often as they wish to select books.

The books in the Braddock Library are purchased in sets of ten or a dozen for supplementary reading in the public schools, and these when not in use are cheerfully loaned to the Western Pennsylvania Institution.

Mr. Edwin Stanley Thompson read a paper written by Mr. BARTON SENSENIG, of Mt. Airy, entitled,

ERRORS IN ARITHMETICAL METHODS.

Arithmetic is a difficult subject, especially for the deaf, but it can be so simplified that it will be readily understood.

Our first duty is to lay down a foundation of ideas. Some proceed to give these ideas by means of definitions, but a definition is not understood unless a child has sufficient ideas upon the subject of which the definition treats.

If a child understands, he can make good enough definitions. If he does not understand the definitions learned from the text-book, a *correct idea* is better than a good definition. These ideas are given by the use of objects and illustrations, and explanations are made in terms familiar to the child. Definitions come last.

The chief error lies in too much relying upon the *doing of problems* to suggest the meaning of the subject under consideration. By doing many problems of a certain kind, pupils may infer some things which are true of a subject, but they make few correct inferences unless they first understand the nature of the subject with which they are dealing. Learning to do by doing results in a mechanical dexterity of reckoning not at all commensurate with the ideas the pupil has upon the subject.

After a child knows how to figure well, the chief business of the teacher is to make plain the subjects which he is teaching rather than to content himself with giving exercises on figuring.

Language, spoken or written, is the usual means of conveying ideas, but an illustration with an object or by a drawing is more forcible.

The word method and the objective method may be illustrated by an example. Suppose it is required to find the number of board feet in a plank of given dimensions. By the word method, we define a board foot as being a foot square and an inch thick and state that there are twelve board feet in a cubic foot. By the objective method, we have a board foot and a cubic foot box in the class-room. The board foot may be the lid of the cubical box. We show the child that twelve board feet piled up take up as much room as a cubic foot, or in other words twelve board feet make a cubic foot of wood. The pupil sees and understands, and after the board foot and the cubical box have been put into

the closet, the pupil in his imagination builds up a cubic foot with twelve board feet. The presence of the object after the illustration has been made hinders the reasoning process and therefore the object should be removed.

The objective method should be resorted to in all cases where it is possible. A rod-pole should be at hand. The acre should be measured with it on the lawn, and a mile should be measured once, so as to have some definite distance to refer to as a mile. A square mile may be approximately indicated. A pint, a quart, a gallon, a bushel, and other measures should be at hand. All measures should be definitely comprehended by the pupil. If the measures are not comprehended the pupil's ideas will be vague.

Tables of measure should not be taught as memory exercises. The child gets into the habit of running over tables in a glib way, not thinking of the measures at all. The child should be made to make his own comparisons as far as possible. The tables should not be set down in the text-book for reference excepting in a way like this:—

inches = 1 foot;
feet = 1 yard;
yards = 1 rod;
320 rods = 1 mile.

The teacher's office is to so picture relations and sizes as to get the pupils to draw correct inferences.

The old-fashioned way of teaching arithmetic was to find a good way of doing a thing and then to formulate the method into a statement called a *rule*. Whether the rule was understood by the pupil or not, it served as a means of obtaining correct results. It was a happy way for those who did not understand a subject to obtain the required results. The rule is soon forgotten, and the

following year must be learned again. More time has been lost in teaching arithmetic by the rule method than in any other way. If the pupil understands, he will proceed along right lines regardless of rules. Then, again, the rule may be harder to understand than the subject to which it applies. Strike every rule of operation out of text-books on arithmetic.

Many authors of modern text-books agree to this statement. They use the "spiral method." By the spiral method, the various subjects which have been treated are constantly passing under review. When a new subject is taken up, a lot of problems are given under that subject, then a general review follows, after which another subject is taken up, and so on. It is left to the teacher to make explanations and work out definitions, and right here lies the weakness in this method. If the teacher does not make the subject matter very plain the pupils will remember how to do the problems because of the fact that the subject is brought up every few days, and the child learns how to do things without fully understanding. If the child does not fully understand, it will probably forget as in the case of proceeding by rule. It is another case of learning to do by doing without fully understanding.

Explanations must be repeated. The mind must be made to work in the same groove as when the first explanation was given, to deepen the impression. The spiral method is the best if the teacher relies on good explanations to make the subject plain rather than on repetition of problems.

The personal equation of the teacher is another source of error. The pupils who are with a teacher for several years know about how the teacher thinks, unless he is very original. They understand the teacher's questions better than those of a stranger. The teacher may fall

into the habit of stating problems in the simplest language instead of in ordinary arithmetical language. This is an error. The language as employed by the hearing should be used. It is not necessary to use the simplest forms. A pupil in mastering a subject must master the language of that subject. The pupil who becomes familiar with the teacher's way of thinking follows the line of least resistance, and in the majority of cases comes to the correct result without doing any serious thinking. Pupils should be made to *think*, so that those who simply follow the path of least resistance will all fail.

Many questions demanding similar operations should not be given in the same lesson. After two such problems have been done, the pupils see the similarity and from that stage on the work becomes mechanical. In giving examinations, the teacher should not give a few easy problems which can be done without thinking. Make the problems so that those who do not think will fail absolutely. Some pupils are satisfied with a mark of forty or fifty, but they are very much dissatisfied with nothing. Those who do not think should be tremendously dissatisfied. If some make a hundred and the thoughtless make nothing, the latter conclude that it is not the teacher's fault, and the next time the teacher presents a subject in a simple, empirical way their minds may not be occupied with extraneous things.

Arithmetic in the more advanced classes should be a *thought* study. The pupil should not be allowed to come by results without making comparisons. Any method of teaching arithmetic which displaces the rational method is wrong.

The teacher in his talks and illustrations gives ideas, and by comparison of these ideas the pupils draw conclusions. The teacher can stimulate the pupil to make comparisons by making suggestions and by asking ques-

tions. To teach by rule, to depend upon repetition, to teach how to do problems and have the pupils remember without fully explaining the reasons for the doing, will end in confusion and the results will be unsatisfactory.

At the general session on Thursday the Association was favored with a very interesting and able address on

DEFECTIVE HEARING AND AIDS FOR ITS IMPROVEMENT,

by Dr. CHEVALIER JACKSON, one of Pittsburgh's most prominent specialists. Dr. Jackson explained the anatomy and physiology of the ear, and discussed the causes of deafness and means of prevention, speaking encouragingly concerning the better understanding of ear diseases and the probability of a reduction in the future of the percentage of cases of adventitious deafness. Dr. Jackson illustrated his lecture with numerous blackboard drawings and exhibited to the audience various devices intended to aid the hearing, but gave it as his opinion that the old style of hearing tube with its column of air was probably less apt to injure the hearing than were instruments that greatly magnified the sound vibrations in the ear.

At the conclusion of the lecture, Dr. CROUTER asked Dr. Jackson at what stage he would recommend the use of mechanical devices to aid the hearing.

In reply, Dr. JACKSON said that, generally speaking, he would say never to use them so long as the voice alone would serve. He stated that long-continued use of the telephone, for example, in the case of exchange operators, causes a slight deterioration, a little degeneration, in the

nerve of hearing. Compared with instruments intended to aid the deaf, the telephone has an exceedingly gentle vibration; hence, he believed that continuous use of powerful telephonic devices would prove detrimental rather than beneficial to the hearing of the users.

When asked by Dr. WESTERVELT whether he thought the use of the ordinary telephone would injure the hearing if not used to excess, Dr. JACKSON stated that in his opinion the use of the telephone with pupils who had defective hearing would provide needed exercise and if used only an hour or two a day would work no injury to the hearing.

Miss YALE asked Dr. Jackson whether he thought the ordinary paper roll skilfully made by the teacher would not prove as effective as hearing tubes or other devices, and added that such was the claim of one of New England's most gifted specialists.

Dr. JACKSON said that the paper roll would certainly have its advantages over the tube, especially from a sanitary point of view.

At the conclusion of the discussion, Dr. Crouter thanked Dr. Jackson for his excellent address, and then introduced the next speaker, Miss KATE H. FISH, of Gallaudet College, who read a paper entitled

SPEECH WORK FOR OLDER PUPILS.

Miss Fish maintained that, while the articulation instruction of the adult deaf-mute is in some respects more difficult than the task of teaching little deaf children to talk, it is far less laborious than is usually asserted. In the case of the older pupil, we have the great advantage of his intelligent co-operation. He wants to learn to talk or he would not be in the articulation class. Then, although the organs of speech are more pliable in early youth, nevertheless, constant practice in scientific lip and

tongue gymnastics will soon limber the speech apparatus of any deaf adult.

The articulation status of students who come to Gallaudet College ranges from the harsh rudimentary sound made by the wholly untaught to normal speech. At the present time, though, the number of students who have had no instruction whatever in speech is small. In addition to this small number of the previously untaught may be added, first, those who have had one, two, or three years of speech work in the State or other schools and then dropped the subject entirely. Second, those who have been nominally taught in classes so large that the articulation teacher was unable to do justice either to himself or his pupils. Third, the neglected semi-mute.

Of these four classes Miss Fish regarded the first (that of the wholly untaught) as the easiest to deal with. The student who has never spoken comes prepared to do exactly what his teacher tells him to do without the irritating self-conceit of slightly informed ignorance. He has no incorrect ideals of speech. He unquestioningly accepts his teacher's standards of lip and tongue positions. Given such a student of fair natural ability, success is almost sure.

It is the rule in some schools to put all beginners into an oral class. Many of these children are dropped later from the class, not always, it would seem, with good and sufficient reason. Too often a deaf child's own whim decides the matter. Again, the oral classes become over-crowded and almost any excuse is accepted to reduce numbers. According to their own testimony, some of the brightest young men and women at Gallaudet were thus dropped from their articulation classes. Their vocal organs are normal. There is no apparent reason why they should not be good talkers and lip-readers. Many of these young people, graduating, acknowledge

gratefully that among the benefits which they have received from Gallaudet College the gifts of correct speech and lip-reading are by no means least.

But some among this class of students are hard to deal with. During the years in which their speech has been neglected they have fallen into the use of an unintelligible jargon. Such a student usually has a fluency of utterance only matched by the volume of his self-conceit that his speech is agreeably perfect. When convinced, finally, to the contrary, he is apt to become fearfully discouraged, so that, in meeting conceit and trying to keep up the student's interest in articulation, the teacher finds himself between the devil and the deep sea. First of all such a pupil must be taught to hold his vowels steady. He must stop making superfluous positions. He must be shown how to connect sounds closely. He must take position before he gives sound and stop sound before changing position. It is better to make him pronounce each word by itself than to try to keep up continuity of sound in sentences at the expense of distinctness. If such a student is in dire earnest he may be helped to talk respectably.

Other students have been seriously harmed by being *retained* in an over-crowded oral class. Our schools need not only more but smaller oral classes.

The neglected semi-mute is numerously represented at Gallaudet. Sometimes he is the product of a succession of private teachers, some of whom have been capable, others incapable. Sometimes he comes from a public school where teachers lacked either knowledge or inclination to deal with his speech needs. Nor are some schools for the deaf without blame in regard to their treatment of the semi-mute. Too often he is left practically unheeded as far as his speech is concerned. The naturalness of his talking covers a multitude of sins of vowel

and consonant omission and commission. He seems to talk so easily that the busy teacher of congenitally deaf pupils hardly notices his gradual lapse from normal speech.

Miss Fish gave in detail several examples typical of the difficulties encountered by the teacher of adult deaf. In closing she said that discouragement often descends upon us all. Our work is hard. Nevertheless, the truth remains that we are called of God. Every deaf child has a right to be taught, either early or late, to use his organs of speech. Here the old proverb is emphatically true—"Better late than never."

On Thursday evening a large audience assembled in the chapel and enjoyed a literary and historical treat in the address on "Colonial Pittsburgh," by Dr. SAMUEL HARDEN CHURCH, of Pittsburgh.

FRIDAY, AUGUST 31.

Miss YALE presided during the first part of the session.

After the opening prayer by Dr. G. O. FAY, of Hartford, Miss MARY MCCOWEN read a paper entitled

HOW BEST TO SECURE INTELLIGIBLE SPEECH IN DEAF CHILDREN.

Speech for the deaf as for the hearing child is but a medium of expression and for its value depends entirely upon preceding steps. It cannot be considered apart from other activities of the mind; accordingly a discussion of the processes involved in the acquisition of language by a hearing child will give us the relation which

speech bears to language in its normal evolution, and will furnish a basis for comparison both as to the processes and the results obtained in our attempt to give deaf children intelligent speech. In the complex process of learning to speak, which Compayré characterizes as the highest act of human evolution, the hearing babe passes through a number of stages which involve the possession and co-operation of certain physiological organisms and intellectual faculties.

After reviewing the normal method by which the hearing child naturally acquires speech, emphasizing the periods of preparation in the reception of sounds and of spontaneous articulation that precede the interpretation of the speech of others, and that in which after numerous and constant imitations of speech the child finally comes to a spontaneous use of language, Miss McCowen stated that even the speech of the normal hearing child is often for a long period crude and imperfect, but is perfectly intelligible to those accustomed to it. In like manner a foreigner learning English may omit entirely certain sounds and maltreat others, may mix tenses and otherwise abuse the English sentence, but if he makes himself understood he is said to have intelligible speech. Speech, then, the flower of language, of which there is no standard of absolute perfection, though there are many degrees of intelligibility, even very imperfect speech, comes to the hearing child only after a long period of mental and physical growth, training, and development.

Speech for the child born deaf is a potentiality though not an actuality. He is in possession of the machine but the belts have not yet been adjusted to the pulleys nor has he yet learned to handle the instrument; in his case one important pulley is lacking in the machine and there will have to be a readjustment of the belts; but if this be done early enough, work can proceed very smoothly,

though somewhat retarded, especially in the beginning. The steps between the condition represented by no speech and intelligible speech are for him identical with the steps taken by the hearing babe in covering the same ground.

The language of speech, however, by which he is surrounded, cannot reach his consciousness and cannot, therefore, awaken a response in either interpretation or imitation of spoken words. His wants demand expression and he uses both voice and motions, the former less and less frequently as the months pass and the latter more and more freely. With equal intellectual possibilities he can never develop unconsciously a knowledge and use of language and speech as does the hearing babe. Since this is true, to what extent and how can we apply to advantage the laws deduced from a study of the normal hearing child? Though the defect of the deaf child is serious, the fact remains that all the functions of his body and his mind are subject to the same laws that control the growth and development of the hearing child. Our aim in giving him an education, and especially in giving him language and speech as a basis for education, should be to work as nearly as possible along nature's own laws. We should supply conditions that will enable him to get through conscious effort what, because of his deafness, he cannot get unconsciously. We should surround him by language which he is led to see, and allow him to enjoy the full period of impression, that is, of seeing, understanding, and growing into a knowledge of language through its use, before we insist upon accurate analytical articulation. We should not only help him to acquire language through its use, but should allow him to know and speak words and sentences, even though imperfectly, when used as the symbols of thought and as a means of spontaneous self-expression. We should make use of every possible

opportunity in daily companionship during the natura activities of home and early school life to help him extend his knowledge of language, and should gradually lead him, through conscious imitation and by suggestion, to correct his inaccuracies in articulate speech.

From this point his education can proceed along more natural lines. Miss McCowen stated that ideal conditions seldom exist and that we must take the deaf child as we find him at five, seven, ten, or even twelve years of age.

During the formative language period the teacher, who should be trained in the sciences of psychology and pedagogy, and an expert in the analysis of sound production, should take note of the child's errors in imitative utterance by a series of systematic exercises, vocal gymnastics as it were, strengthening the physical mechanism when weak, training the hearing where even a little adds to the success and ease in modulation, and furnishing the child with incentives to and avenues for expression of thought by the use of exercises that will quicken the intellect and strengthen the body, thereby enhancing the possibility of more and better speech.

It was announced that the paper on the "Classification of Pupils and Methods of instruction Pursued in Schools for the deaf in Denmark," by Mr. Anders Hansen, of Nyborg, Denmark, would be published in the report of the meeting. Mr. Hansen had expected to be present to read his paper, but owing to the postponement of the meeting had returned to his home.

Mrs. Westervelt read a tribute to the memory of Alexander Melville Bell written by Miss SARAH FULLER, of the Horace Mann School, Boston. After referring to

the winning personality and gracious manner of Professor Bell, as well as his true greatness as a man who had ever a high regard for the sacredness of truth, honor, and justice, Miss Fuller recounted briefly the life-long and valued labors of Professor Bell as teacher, lecturer, and author on both sides of the Atlantic, and in concluding said: Indispensable to the student of speech as is all that has been indicated in these allusions to Professor Bell's work, we are forced to admit that his greatest service was in the invention and formulation of his system of Visible Speech. The labor of twenty years crystallized in the pages of a book written with the thought of the needs of all the people of the entire globe!

The last paper read was by Hon. JOHN HITZ, Superintendent of the Volta Bureau, on

THE PROGRESS OF SPEECH WORK IN FOREIGN SCHOOLS.

Mr. Hitz introduced the subject by giving a concise history of speech-teaching from the time when the venerable historian Bede (673–733), credits his instructor, the Bishop St. John of Hexam, founder of Beverly Minster, with having taught a deaf and dumb youth to speak, to the date of Amman's treatise on speech-teaching, published in 1692–1700, entitled *Dissertatio de Loquela*, whom Eduard Walther, Director of the Royal Institution at Berlin, Germany, designates as the real founder of the so-called "German Method." Heinicke was credited with having opened (1778) in Leipzig the first public school devoted exclusively to the teaching of speech to the deaf.

Tables of foreign speech-teaching schools given in the *Annals* for January, 1882, were introduced to show

the standing of speech-teaching at that period, followed by another table giving the estimated number of pupils being taught speech in foreign schools at the commencement of the present century, aggregating 24,008 out of 26,697 under instruction in all other countries than the Americas.

Comparing Europe and America, Mr. Hitz noted that, while in foreign schools the teaching of speech to very young children is disapproved of, in America kindergarten classes are being successfully introduced in some schools; and as another divergence between foreign and American teachers of speech he noted the fact that, while abroad teachers continue to rely on the diacritical marks of lexicographers for their varied alphabetic standard of sounds, American teachers prefer the more scientific standard of the Visible-Speech system of the late Professor Alexander Melville Bell.

In conclusion, Mr. Hitz invited attention to a pamphlet provided for distribution, giving the law recently enacted in France, completely secularizing and incorporating the instruction of the deaf in the public school system, which he thinks will tend to greater uniformity of method and extend speech-teaching work.

ANNUAL BUSINESS MEETING.

At the annual business meeting of the Association Dr. ALEXANDER GRAHAM BELL, Mrs. GARDINER G. HUBBARD, Dr. A. L. E. CROUTER, Miss MARY MCCOWEN, and Mr. J. W. BLATTNER were re-elected members of the Board of Directors for the ensuing three years.

Mr. LYON offered a resolution on the death of Alexander Melville Bell, which was adopted by a rising vote.

Mr. BOOTH read the Treasurer's report for the last fiscal year.

Mr. JOHNSON, of Indiana, asked to be permitted to say a few words regarding the pensioning of teachers of the deaf. He referred to the Carnegie Foundation, and recommended that a committee of three be appointed by the chair to take up the matter of pensions and see what can be done.

Mr. JOHNSON spoke also concerning the education of the deaf in China and in Cuba, urging that the Association take suitable action to promote the cause. He spoke of the work of Mrs. Mills, also of certain efforts he had made to bring the education of the deaf to the attention of the Chinese Government.

Dr. WESTERVELT told how the pupils in his school aid Mrs. Mills in her work by soliciting small subscriptions from their friends and acquaintances during the vacation. He furnishes each pupil with a pass-book with an authorization from the School to act as a collector, and each person who contributes as much as ten cents is given a booklet telling about the work of Mrs. Mills.

Dr. CROUTER stated that he had been in correspondence with President Palma, who had expressed a deep interest in the matter of the education of the deaf in Cuba and had promised that, as soon as the resources of the government of Cuba warranted it, steps would be taken to establish schools.

A resolution was passed by the Association, in accordance with the suggestion of Mr. LYON, endorsing the work of Mrs. Mills.

By special request Miss HARRIET B. ROGERS addressed the Association. She spoke of the great pleasure she had had in being present at the meeting, and complimented the members on its success. She referred briefly

to her own work, her early trials and difficulties, and concluded by emphasizing the importance of the teacher of speech being thoroughly familiar with the principles of Visible Speech.

A series of suitable separate resolutions was then adopted, thanking the host and hostess, the officers and instructors of the Western Pennsylvania Institution, the lecturers, and, in short, all who had taken an active part in contributing to the success of the meeting.

Resolutions were also passed expressing regret at the absence of Dr. Alexander Graham Bell and thanking him for his valuable work on the Mechanism of Speech and for his generous gift to the Association, making possible the enlargement of the normal department at Northampton.

A resolution was adopted requesting the Board of Directors to arrange for a summer school for instruction in speech whenever the number of teachers desiring instruction shall justify the arrangement.

Attached to the resolution thanking Superintendent Jones and Miss Lyon for their exposition of work with Leslie Oren was the recommendation that they be invited to attend all summer meetings held while Leslie remains in the Ohio Institution, so that members may have the opportunity of watching his development.

The President appointed the committee suggested by Mr. Johnson, naming as members Mr. JOHNSON, Mr. LYON, and Dr. BELL. By special vote of the Association the President was made an *ex officio* member of the committee.

After the singing of "America" the Seventh Summer Meeting was closed with prayer by Dr. G. O. FAY, of Hartford.

ALBERT C. GAW,
Instructor in Gallaudet College, Washington, D. C.

NOTICES OF PUBLICATIONS.

BELL, ALEXANDER GRAHAM. Lectures upon the Mechanism of Speech. Reprinted from the Proceedings of the First Summer Meeting of the American Association to Promote the Teaching of Speech to the Deaf. New York and London: Funk & Wagnalls Company. 1906. 8 vo, pp. 129.

One of the most valuable features of the First Summer Meeting of the Association to Promote the Teaching of Speech to the Deaf, held in 1891, was a course of lectures by Dr. Alexander Graham Bell upon the organs of speech and their functions, including the entire mechanism of vocal utterance.

No one understands this subject, so important for articulation teachers, better than Dr. Bell, and no one can present it in a clearer way than he does in these lectures. As here reprinted, the lectures have the additional advantage of the practical questions asked at the close of each lecture by a group of eager and intelligent teachers of the deaf, and Dr. Bell's replies. The book is illustrated by pictures showing the organs of speech and the positions of the several sounds. In an appendix is given a paper on "Vowel Theories," read before the National Academy of Arts and Sciences in 1879.

DENIS, THÉOPHILE. Étienne de Fay dit "Le Vieux Sourd-Muet" d' Amiens. Notice Biographique [Biographical Sketch of Étienne de Fay, called "The Old Deaf-Mute" of Amiens]. Saint-Valery-sur-Somme: Ricard-Leclercq. 1905. 8 vo, pp. 12.

Nearly twenty years ago Mr. Denis published a sketch of Etienne de Fay, the first known instructor of the deaf in France, which was translated and published in the *Annals*, vol. xxxii, pages 113–118. In the present pamphlet the author gives fuller particulars, which he has since obtained concerning this remarkable man, who was a deaf-mute from birth, a successful teacher of the deaf, and an accom-

plished architect years before the time of Péreire and De l'Épée. Who his teacher was still remains a mystery, but there is every reason to suppose it was a monk of the Abbaye de Saint-Jean, at Amiens, in which establishment Etienne de Fay himself had his class of deaf pupils.

McCUE, DAVID C. Manual of Primary Number Work. Fulton: Missouri School for the Deaf. 1906. 8 vo, pp. 45.

Mr. McCue's Manual is intended for the use of teachers and is not to be put into the hands of pupils. It outlines definitely the course of instruction for the first, second, and third grades, carrying it as far as denominate numbers. Its fourfold aim is stated as follows:

I. So to unify methods in primary number work that pupils in graded schools may be promoted, or transferred from one class to another of the same grade—the teacher knowing just what has been taught and how—and that the progress of the pupil may continue unretarded after such change has been made.

II. To furnish fixed standards by which all primary number work may be measured, to the end that the pupils may understand readily the reason underlying every correction made by the teacher.

III. To make exercises in number work an aid in teaching language, for the more written language the pupil, especially the deaf, can be led to use accurately and intelligently, the better it is for him.

IV. To cultivate the habit of close observation, and to develop the reasoning powers of the child.

The course is carefully and thoughtfully worked out and many valuable suggestions are given.

REUSCHERT, E. Aus aller Welt. Ein Lesebuch fur Taubstumme [Out of all the World. A Reader for Deaf-Mutes]. Berlin: Dierig and Siemens. 1906. 8 vo, pp. 56.

A good selection of short stories and other reading matter, printed in a variety of styles of German and Roman type. This reader forms the third volume of Mr. Reuschert's

"Kleine Erzählungen," the first and second volumes of which were noticed in the *Annals*, xlvii, 477, and xlviii, 284.

SWEET, CAROLINE C. First Lessons in English for the Deaf. Revised Edition. Hartford: The American School for the Deaf. 1906. 12 mo, pp. 116.

The first edition of Miss Sweet's First Lessons was reviewed in the *Annals*, vol. xxx, pp. 164–167, and has been discussed by several writers in subsequent volumes. The present edition "is issued to meet the wishes of some who believe it better to teach the past tense of the verb before the present tense." Dr. Williams in his preface takes occasion to express his own preference for beginning with the root form of the verb, and adds that the unrevised and generally preferred edition is still on the market. Some new illustrations drawn by Miss Clara L. Bell, now Mrs. Thurston, add to the attractiveness of the book.

SCHOOL ITEMS.

Alabama School.—Miss Olga Gebhart, a valued teacher, died last June. She is succeeded by Miss Mabel K. Jones, formerly of the Pennsylvania Institution. Mr. Osce Roberts has resigned to engage in business, and is succeeded by Mr. H. McP. Hofsteater, from the North Carolina School at Morganton. Mr. Harry Best has resigned and his place is not yet filled.

The carpenter and cabinet shop and planing-mill, destroyed by fire in July, 1905, have been replaced with a larger and better building and a more complete equipment in every way.

American School.—Miss Laura E. Bell does not teach this year on account of the state of her health. Miss Olive M. Jacquess, from the Rhode Island Institute, is appointed a teacher.

Central New York Institution.—The Institution has been reorganized. The new Principal is Edward Payson Clarke, M. A., a graduate of the Normal Department of Gallaudet College, a teacher in the Utah School from 1896 to 1899, and since then in the New York Institution. The following new teachers are appointed: Elmer D. Read, M. A., a graduate of the Normal Department at Gallaudet and for the past five years a teacher in the Oral Department of the Texas School; Miss Stella C. Rupley, trained in the Oral Department of the Missouri School; Miss Mabel Taylor, trained in the Oral Department of the Western Pennsylvania Institution; Miss Edna D. Gent, of Indianapolis, a graduate of the Kindergarten and Normal Training School in that city, and Miss Laura V. C. Stewart, a graduate of the Emerson School of Oratory, Boston; Mr. O. A. Betts, from the North Carolina School at Morganton; Mr. Howard E. Thompson, from the Georgia School; and Miss Nellie A. O'Connor, from Miss Garrett's training school.

Clarke School.—Miss Georgia Field, science teacher in the grammar department, Miss Anna Jaquith, teacher of gymnastics, and Miss Clara Lathrop, for many years teacher of drawing, have resigned. Miss Margaret L. Drake takes the vacancy in the grammar department, Miss Susanne Lathrop the art work, and Miss Mabel H. Gray, of Auburndale, is engaged as an additional teacher.

Freberg School.—Mr. Eyvind Boyesen, Principal of the Agricultural School for the Deaf at Freberg, Sandefjord, Norway, visited schools for the deaf in the United States in May and June last.

Gallaudet College.—On Presentation Day, May 2, 1906, addresses to the graduating class were given by President Roosevelt and Mr. John Sparhawk, Jr., of Philadelphia.

At the close of the term the following degrees were conferred in course: Master of Arts; Winifred Osgood

Hammond, B. A., Herbert John Menzemer, B. A., Lyman Steed, B. L., B. Ped., Normal Fellows. Bachelor of Arts: Enga Christina Anderson, Mabel Edith Fritz, William Combs Fugate, Daisy Margaret Henderson, Thure Axel Lindstrom, Edna Laura Marshall, Frank Emory Mikesell, Dan Merrill Reichard, Edward Murdock Rowse, William Woodruff Sayles. Bachelor of Science; Charles Lane Clark. Miss Bessie Davidson received a normal certificate.

Georgia School.—Miss Mary A. Harris, a teacher in this School for the past twelve years, has resigned.

Glasgow Institution.—Dr. James Kerr Love, Honorary Aurist to the Institution, well known to our readers by his valuable work on "Deaf-Mutism" (reviewed in the *Annals*, vol. xli, pp. 255–259), has visited schools for the deaf in Europe and America this year under a grant from the Carnegie fund bestowed upon the Scotch Universities for original researches.

Horace Mann School.—Miss Amy L. Pleadwell has been appointed teacher of drawing.

Miss Elizabeth Porter Gould, the author of "The Brownings and America" and other works, who died July 28, 1906, was much interested in the education of the deaf. One of her minor works was "An Offering in Behalf of the Deaf," published by the Parents' Education Association connected with this School.

Idaho School.—A State School has been established at Boise, Idaho. For the present it occupies a building on the state-house grounds. Mr. James Watson, for the past eighteen years at the head of the Washington State School, is Superintendent.

Kansas School.—Miss Ellen J. Israel, a veteran teacher, died suddenly of heart failure at Brighton, Iowa, August 26, 1906, while visiting a brother. She began her work among the deaf in the Iowa School in 1866. In 1878 she

resigned and became a teacher in the Kansas School. Since then she has taught continuously in this School except for a brief period when she returned to the Iowa School. She was well known in the profession, having attended several conventions. A faithful and successful teacher, she exerted an influence for good upon many successive classes of pupils.

Miss Grace McCaughey, trained in this School, has been appointed a teacher in the Oral Department.

A new laundry and stand-pipe have been erected at a cost of $5,000 each. The pipe has a capacity of 8,500 gallons.

Kentucky School.—Mr. Harris Taylor, of the Pennsylvania Institution, has been appointed to the newly created office of Supervising Teacher and will have general supervision of the school work under the direction of the Superintendent.

An electric light plant was installed during the summer and other improvements, costing about $20,000, were made.

Minnesota School.—Mr. F. R. Wheeler has resigned to engage in business, Miss Mesa A. Barns to keep house for her father, Miss Anna R. Dixon to teach in the Tennessee School, and Miss Elise C. Engleman to teach in the Florida School.

Mississippi Institution.—Mr. E. L. Gordon, son of Mr. F. M. Gordon, for over twenty years head teacher in the Negro Department of the Georgia School, has been appointed head teacher and his wife assistant teacher in the Negro Department.

Contracts have been made and work has begun on the two wings ($50,000) to the main building; an industrial hall, $13,285; barn and dairy building, $2,500; and other improvements, about $5,000. The appropriation for the building for the Negro Department was found to be too small for the plans adopted. Rather than change the plans the Board has decided to hold the appropriation until the meeting of the Legislature and ask for $5,000 additional, so as to make the building complete.

Montana School.—Mr. McAloney has resigned the position of Superintendent to accept the superintendency of the Western Pennsylvania School for the Blind at Pittsburgh. He is succeeded by Mr. Laurence E. Milligan, M. A., a graduate of the Normal Department of Gallaudet College, formerly a teacher in the Georgia School, and more recently in the Colorado School. Mr. Allen T. Schoolfield has resigned to accept an important position in the railroad business. His place has been filled by the appointment of Mr. T. C. Forrester, from the Ontario Institution.

Nebraska School.—Miss Linda K. Miller has resigned to teach in the Washington State School, Miss Nellie Nichol in the Oregon School, Miss Emma Sitton in the North Carolina School at Morganton, and Mr. Louis A. Divine in the Tennessee School. Mr. H. D. Drake, a graduate of Ohio and Gallaudet and late supervisor in the California Institution, is appointed teacher in the Manual Department; Miss Frances Campbell, from the Michigan School, and Miss Minnie Rupley, from the Kentucky School, are appointed teachers in the Oral Department.

New Mexico School.—Mr. Larson, the founder of this School and its Principal from the beginning, has retired and is succeeded by Mr. Wesley O. Connor, Jr., M. A., of the Iowa School.

New York Institution.—Mr. Edward Perkins Clarke has resigned to become Principal of the Central New York Institution and is succeeded by Mr. Ashbel Webster Dobyns, M. A., late of the Arkansas Institute. Miss Amey Thurber has resigned on account of family duties, and Miss Edna B. Lewis to enter another field of labor. Miss Alice C. Eckert, from the Washington Heights School for Children with Defective Hearing, and her sister, Miss Anna L. Eckert, trained in the same school, have been appointed teachers in the Articulation Department.

The new hospital for contagious diseases is near completion.

North Carolina (Morganton) School.—Mr. D. R. Tillinghast, a teacher in this School and the School at Raleigh for forty-three years, has been relieved of regular class-room work, and appointed chaplain and substitute teacher. Mr. and Mrs. Edwin G. Hurd have resigned to go the Rhode Island School, Miss Nettie McDaniel to the Virginia School, and Mr. H. McP. Hofsteater to the Alabama School. Misses Lucile Cooper, Robina Tillinghast, Carrie Stinson, Cooper Feland, and Frances McClelland have also resigned to teach elsewhere. Mr. Tunis V. Archer, from the Indiana School, is appointed Principal of the Educational Department, and Miss Eugenia T. Welsh Chief Instructor of the Oral Department. Miss Ethel Richards and Mrs. Fannie C. Smith of the Rhode Island School, Miss Whitley Murphy of the Virginia School, Miss Emma Sitton of the Nebraska School, Miss Annie McD. Ervin of the Georgia School, Miss Mary McNamar of the Florida School, Miss Emma A. Dobbins of the Oregon School, Miss Mary Gartrell, Miss Edna Bryan, and Miss Nannie C. Orr are added to the corps of instruction.

Nyborg Institution.—Mr. Anders Hansen, Vice Principal of the Nyborg, Denmark, Institution, visited American Schools for the Deaf in May and June last.

Ohio Institution.—Miss Helen G. Throckmorton, of the Pennsylvania Institution, has been appointed Supervising Teacher of Speech.

Oklahoma School.—Mr. Beamer has resigned the position of Contractor and Superintendent on account of ill health. He is succeeded by Mr. R. N. Dunham, an Ohio Wesleyan University man, who was engaged for many years as General Secretary in the work of the Young Men's Christian Association. Mrs. Dunham remains as Principal. The additional teachers are Miss Robina L. Tillinghast, from the North Carolina School, and Miss Mae Belle McKinley, trained in the Kansas School.

Pennsylvania Institution.—Miss Elizabeth R. Young, a teacher in this Institution for the past ten years, died May 21, 1906. "Never robust, often suffering intense pain, Miss Young was invariably cheerful and animated. A strong will enabled her to do more than would seem possible for one so frail, while her kindly, genial humor buoyed up her spirits and added to the happiness of those around her. She was a Christian whose life was full of kind words and good deeds."

At the Conference of the National Association of Charities and Correction, held in Philadelphia last May, Dr. Crouter read an excellent paper on "The Care and Training of the Deaf." It was printed in full in the *Illinois Advance* for May 19, 1906.

Perkins Institution.—Mr. Michael Anagnos, for nearly forty years connected with the Perkins Institution for the Blind and for more than thirty years its Director, died at Turn Severin, Roumania, June 29, 1906, aged sixty-nine. Mr. Anagnos was born in Epirus, Greece. His family name was Anagnostopoulos, but he shortened it to Anagnos. He was educated at the high school at Janina, which he afterwards endowed, and at the University of Athens. He took an active part in the struggle for Greek independence in 1862. In 1868 he was persuaded by Dr. Samuel G. Howe to come to America and received an appointment in the Perkins Institution. In 1870 he married Dr. Howe's daughter, Julia Romana, and became his father-in-law's first assistant. On Dr. Howe's death in 1876 he succeeded him as Director of the Institution. In the instruction of the deaf-blind, as well as of the blind, he maintained and even raised the high standard established by Dr. Howe, so that for several years the Perkins Institution was regarded by many as the one school where the deaf-blind could be educated. He was a contributor to the *Annals* and took part in the meeting of the Convention of American Instructors of the Deaf held at Buffalo in 1901. No truer characterization of Mr. Anagnos can be

given than the following tribute from the Perkins Institution: "A deep thinker, a wise counsellor, a prophet of good, a great-hearted lover of mankind, a true and far-seeing leader of the blind along the higher paths."

Mr. A. C. Caswell, who has been Mr. Anagnos's first assistant for several years, is appointed Acting Director.

Rhode Island School.—Miss Laura de L. Richards, who has been Principal for the past seventeen years, has resigned, and is succeeded by Mr. Edwin G. Hurd, M. A., formerly of the Pennsylvania Institution and more recently of the North Carolina School at Morganton. Mrs. Hurd will assist in the educational department, and Miss Frances McClelland, from the North Carolina School at Morganton, and Miss Ellen Woodcock, from the Mystic Oral School, have been appointed teachers in place of Mrs. Fannie C. Smith and Miss Ethel Richards, who go to the North Carolina School at Morganton. Miss Elizabeth Hess from the Maine School has been appointed teacher of sewing and cooking.

Numerous repairs upon the buildings have been made during the summer. New finish has been put on the walls of all the dormitories and a number of other rooms, including the basement. The interior woodwork has been revarnished, and the upper main halls and the rooms for officers and teachers have been supplied with new rugs and furnishings.

San Francisco Day-School.—In the earthquake and fire in San Francisco the building occupied by this School was entirely destroyed and all the equipment was lost. Mrs. Holden has reopened the School in a little temporary shack in the burnt district, but still lacks furniture, maps, and charts. Some friends in the east are raising a fund to supply these needs.

Tennessee School.—Miss Anna R. Dixon, formerly of the Philadelphia and Minnesota Schools; Miss Cynthia S. Beck, from the McCowen Oral School; and Mr. Louis A. Divine, from the Nebraska Institute, have been added to

the corps of instruction. Miss Dixon and Miss Beck teach oral classes and Mr. Divine a manual class.

Texas Institution.—Mr. Parker L. Richardson, for many years instructor in printing, has resigned the position to become State printer of Texas. Miss Ethel Makemson, of the Oral Department, has resigned on account of failing health. Miss M. J. Bones, a former teacher of the Manual Department, has returned to the work.

Utah School.—Mr. James A. Weaver has resigned to teach in the Pennsylvania Institution.

Virginia School.—Miss Whitley Murphy has resigned to teach in the North Carolina School at Morganton and Mrs. Stout has withdrawn from the work entirely. Miss Eva Dunbar of Staunton and Miss Grace E. Kinsley, a recent graduate of the Normal Department of the Clarke School, have been appointed to fill these vacancies. Miss Nettie McDaniel of the North Carolina School at Morganton has been appointed head of the Oral Department, with only two periods a day in actual teaching. Mrs. Wilson, who has been teaching in the Manual Department for several years, has been transferred to the Oral Department, as one transfer of this kind is made each session when new pupils come in.

Washington Heights School.—Mrs. J. Scott Anderson has discontinued the summer session of her School for Children with Defective Hearing and has removed the School from 847 St. Nicholas Avenue, New York City, to Swarthmore, Pennsylvania.

Washington State School.—Miss L. K. Miller and Mr. W. S. Hunter, B. A., take the places of Mr. Paul Martin and Miss C. B. Satterly, who have secured other positions. Miss C. L. Gordon has a primary oral class. Mrs. L. K. Clarke teaches the high class and gives articulation lessons. This gives the School three oral teachers instead of one as formerly. The Superintendent does not teach a class this

year. A new dress has been purchased for the "Washingtonian" and Mr. W. F. Schneider is printer and boys' supervisor. Mr. Fred W. Bjorkquest has charge of the shoe-shop and has a class in harness-making. Miss N. G. Wallace is matron and teaches a class in sewing.

The building formerly occupied by the School for the Feeble Minded has been remodeled and renovated and is now used for the School for the Blind. This change gives the deaf much-needed room in the main building.

Experts declared the tower of the main building to be dangerous, and it has been removed, making a marked change in the appearance of the building. Extensive repairs have been made in the plumbing. Shower baths replace tubs and there are enamel wash sinks instead of wooden troughs. Both buildings have been painted and kalsomined inside, and many minor changes made which add to the comfort of every one.

Western Pennsylvania Institution.—Miss Frances Barker has resigned to take care of her mother who is in ill health and Miss Gussie H. Greener has resigned to be married. Miss Mabel M. Morris, from the Oregon School, and Miss Katharine Fritz, from the Ishpeming Day-School, fill the vacancies thus made.

Wisconsin School.—Mr. J. J. Murphy and Miss Delia Rice have resigned. Mr. Fred J. Neesam, B. S., a graduate of the Wisconsin School and Gallaudet College, formerly a teacher in the North Dakota School and the Maryland School at Baltimore, and Miss Winifred Hammond, M. A., a graduate of the Normal Department of Gallaudet College, have been appointed teachers, Mr. Neesam in the Manual Department and Miss Hammond in the Oral. Miss Ethelwyn Hammond of this School takes charge of the class of five deaf-blind, assisted by Miss Mildred Lloyd, a teacher of four years' experience in the Wisconsin common schools. Mr. Louis Sheron takes the place of Mr. John Beamsley, resigned, in the shoe department.

MISCELLANEOUS.

Church Work.—Mr. George F. Flick, B. A., was ordained to the diaconate of the Protestant Episcopal Church, May 30, 1906, at Washington, D. C., by the Right Reverend Bishop Satterlee. The sermon was preached and the services were interpreted in the sign-language by the Rev. Dr. John Chamberlain, Vicar of St. Ann's, New York. Mr. Flick is a graduate of the Ohio Institution and of Gallaudet College and is a valuable acquisition for the religious work among the adult deaf.

Education in France.—We are indebted to Mr. Hitz, Superintendent of the Volta Bureau, for a report of the recent proceedings in the French Chamber of Deputies and Senate relative to the deaf and the blind. A law proposed by Mr. Ferdinand Buisson was enacted, providing that "there shall be placed to the credit of the public school fund the amount requisite to enable schools and classes for the deaf and the blind to participate in the obligatory instruction provided for by the law of March 28th, 1882. The salaries and authorized supplementary allowances granted to male and female teachers of these establishments, shall, in conformity with the enactments of July 19th, 1889, and July 25th, 1893, be charged to the State."

Mr. Buisson says of this law that while the reform it offers is modest, it is promising and a cause for rejoicing. "It does not prescribe to the Minister of Public Instruction a specified period or date, nor any other conditions for establishing normal schlarships for primary teachers of abnormal children. But it clears the way for a fulfillment of a duty clearly expressed by the enactments of 1882 and 1893, within limits and terms to be fixed by said Ministry. To illustrate: Yesterday only, as it were, a certain municipality offered to assume the charge of establishing a school for the blind, the deaf, and other abnormal children capable of

instruction, and said to the State: 'Pay at least the teachers for these thirty or forty children, as you do those for all others.' The State responded: 'No, we shall not pay anything of the kind.' To-morrow the same municipality will apply again to the Minister of Public Instruction, and will solicit the establishing of certain teacherships, which the Minister will have the power to concede, identically the same as if the establishing of an ordinary public school were in question. This he will appreciate, and we are quite sure of what he will do, now that he is at liberty to act."

American Association to Promote the Teaching of Speech to the Deaf.—The office of the General Secretary and Treasurer has been moved from Mt. Airy, Philadelphia, to No. 1525 Thirty-fifth Street, Washington, D. C. This was the home of the late Professor Alexander Melville Bill, presented to the Association by Dr. Alexander Graham Bell.

Foreign Periodicals.—A new French publication by and for the deaf was begun in May last. It is entitled *Revue des Sourds-Muets* and is published monthly at 21 rue Rouget de Lisle, Tours, France. The publisher is Félix Gilibert and the editor Henri Gaillard. The price for foreign subscribers is 97 cents a year. Mr. Gaillard has shown remarkable ability in the conduct of several previous periodicals and we hope that this new effort will not fail, as its predecessors have done, from lack of sufficient pecuniary support.

Mr. I. Landrain, a progressive teacher in the school at Berchem Ste-Agathe, near Brussels, Belgium, began in July last the publication of a monthly periodical entitled *Revue Belge des Sourds-Muets et de leur Enseignement.* The price for foreign subscribers is 97 cents a year.

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